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Listing first 45 summaries
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1: geneseqp1980s:*
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7: geneseqp2003bs:*
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Gapop 10.0 , Gapext 0.5
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Copyright (c) 1993 - 2005 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Abr57177 Human PDG		Aaw41258 Anti-coag	Aau33184 Novel hum	7 Human	Ado33445 Human apo	0 Human		æ	Abu79140 Apolipopr	Abr40253 Human ali	Aao15893 Human apo	Add48677 Human Pro	Aau98981 Human apo	Aaw96826 Amino aci	Apoli	Human	Adj57400 Human apo	Aaw96831 Nucleic a	Aaw41259 Apolipopr	Aaw96844 Nucleic a	Aae14545 Human apo	Aae14542 Human apo	Abj37574 Heparin b	4 A	Description

45	44	43	42	41	40	9	38	37	36	35	34	33	32	31	30	29	28	27	20
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61.9	61.9	61.9	61.9	61.9	61.9	63.5	63.5	63.5	63.5	65.1	65.1	65.1	65.9	65.9	65.9	74.6	74.6	74.6	14.0
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ABG18881	ABP79068	ADA21104	ABP60674	AAE06244	AAG94651	ADI81620	ADP71384	AAE06243	AAE06242	ABB62618	AAW25029	AAW06086	AAG48995	AAG48996	AAG48997	AAW96874	ADM98185	ADN00545	MAE-0000
Abg18881	Abp79068	Ada21104	Abp60674	Aae06244	Aag94651	Adi81620	Adp71384	Aae06243	Aae06242	Abb62618	Aaw25029	Aaw06086	Aag48995	Aag48996	Aag48997	Aaw96874	Adm98185	Adn00545	Addition
Novel hum	N. gonorr	Human sec	Translati	H-K4b pol	Human com	C. elegan	Polymer o	H-K3b pol	H-K2b pol	Drosophil	TATA-bind	Drosophil	Arabidops		Arabidops	Nucleic a		Apolipopr	ode nemnu

ALIGNMENTS

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The present sequence represents a specifically claimed Apo B binding sit peptide which can be used as a component of a non-naturally occurring, receptor-competent low density lipoprotein (LDL) particle of the present invention. The LDL particle comprises at least 1 peptide component that has at least 1 binding site for an apo B protein receptor and at least 1 lipophilic substituent. Also described in the invention are peptides containing an apo B binding sequence with at least 70% identity with sequences: KAEYKNNHRH (1) or TTRLTRKRGLK (2), or their dimers. Non-naturally occurring, receptor-competent LDL particles are useful as: (1) drug-taygeting vectors for delivering anticancer drugs to cancer cells that express an apo B protein receptor, and (ii) additives for cell culture media especially as growth supplements. Non-naturally occurring,	Halbert GW, Owens MD, Baillie G; WPI; 1998-230637/20. WPI; 1998-11pid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells that express this receptor. Claim 12; Page 52; 73pp; English.	Synthetic. W09813385-A2. 02-APR-1998. 25-SEP-1997; 97WO-GB002610. 27-SEP-1996; 96GB-00020153. (UYST) UNIV STRATHCLYDE.	AAW57204 standard; peptide; 11 AA. AAW57204; 03-AUG-1998 (first entry) Apo B binding site peptide 1. Apo B; binding site; receptor; cancer; drug delivery; anticancer; growth supplement; non-natural lipid particle; low density lipoprotein; LDL; receptor component; apo B100 receptor site.

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Query Match Best Local S

Sequence 11 AA;

receptor-competent LDL particles do not require the complete apo B affinity to an apo B protein receptor aggregate, to provide binding

Matches

l Similarity 11; Conser

Conservative

Length 11;

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RESULT 3
AAE14542
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                                                                                                Matches
                                                                                                                       The invention relates to a novel ligand for binding a target biomolecule, which comprises a peptide having at least one sulphated or sulphonated charged amino acids and at least one amino acid chosen from neutral and positively e.g. tumours, rheumatoid arthritis, diabetic retinopathy and hypoxia. This sequence represents a heparin binding peptide relating to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 2
ABJ37574
                                                                                                                                                                                                Use of a ligand comprising of at least one sulfated or sulfonated amino retinopathy and hypoxia.
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                                                                                                                                                                                                                                                                                                                                              30-JAN-2003.
                                                                                                                                                                                                                                                                                                                                                            WO2003007689-A2.
                                                                                                                                                                                                                                                                                                                                                                  Cytostatic; antirheumatic; antiarthritic; antidiabetic; ophthalmological; cardiovascular; circulatory; ligand; sulphated; sulphonated; tumour; rheumatoid arthritis; hypoxia; diabetic retinopathy; heparin.
                                                                                                                                                                                                                                                                                                                                                                                                                Heparin binding peptide sequence #27.
                                                                                                                                                                                                                                                                                                                                                                                                                                     10-MAY-2003 (first entry)
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                                                                                                 Similarity
                                                                     KAEYKKNKHRH 11
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UNIV ZURICH
                                                                                       Conservative
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1; Mismatches
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100.0%; Pred. No. 0.00015;
tive 0; Mismatches 0;
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J.00078;
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X A X E X B X B X
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AAE14545
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Oxidised low density lipoprotein; oxLDL; immunoassay; periaortitis, cardiovascular disease; coronary heart disease, pre-eclampsia,

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The invention relates to peptides having affinity for oxidised low density lipoprotein (oxLDL), in cyclised or multimeric form. The peptide creation in an immunoassay to determine the presence, and optionally, creating the amount of antibodies in a sample, having affinity for oxLDL. The peptide is useful if or measuring the amount of creatiovascular diseases, and several other diseases, and several other diseases, other creatiovascular diseases, and several other diseases, other creation. The peptide of the invention is stable, can be considered easily without the need to isolate proteins from a patient's population of the invention is stable, can be creatived peptide p63 used in the invention sequence is human apoB-100
                                                                                                                                                                                                   Query Match
Best Local S
                                                                                                                                                                                           Matches
Human apoB-100 derived peptide p244.
                                      17-MAY-2002
                                                              AAE14545;
                                                                       AAE14545 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                          Claim 6; Page 5; 21pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                    New peptide useful in enzyme immunoassays for detecting oxidized low density lipoprotein which is a marker of coronary heart disease low iincoronary heart disease and other iincoronary heart disease and other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-JUL-2000; 2000GB-00017641.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ARKT-) ARK THERAPEUTICS LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-JUL-2001; 2001WO-GB003212.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oxidised low density lipoprotein; oxLDL; immunoassay; periaortitis; cardiovascular disease; coronary heart disease; pre-eclampsia; peptide p63.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200206314-A2.
                                                                                                                                                        1 KAEYKKNKHRH 11
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1 Similarity 95.2%;
10; Conservative
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                                                                                                                                    KAQYKKNKHRH 14
                             (first entry)
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                                                                       24 AA.
                                                                                                                                                                  Score 60; DB 5; Le
Pred. No. 0.00099;
1; Mismatches 0;
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AAW96844

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Matches 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to peptides having affinity for oxidised low density lipoprotein (OXLDL), in cyclised or multimeric form. The peptide is useful in an immunoassay to determine the presence, and optionally, the amount of antibodies in a sample, having affinity for oxLDL. Preferably immobilised peptide is useful for measuring the amount of autoantibodies for oxLDL in a sample, especially a serum or plasma sample from a patient for evaluating the risk of coronary heart diseases, other cardiovascular diseases, and several other disorders such as periaorritis, pre-eclampsia, non-insulin-dependent diabetes and endothelial dysfunction. The peptide of the invention is stable, can be synthesised easily without the need to isolate proteins from a patient's blood, and has a long half-life. The present sequence is human apoB-100 derived peptide p244 used in the invention
                                                                                                                                                                                                                                       Human apolipoprotein B-100; apoB-100; very-low density lipoprotein; VI apolipoprotein; binding; in vivo transport; nucleic acid; binding dom nuclear localisation sequence; gene therapy; cancer; cystic fibrosis; non-small cell lung carcinoma; diabetes; arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                            Nucleic acid binding domain from apoB-100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New peptide useful in enzyme immunoassays for detecting oxidized low density lipoprotein which is a marker of coronary heart disease and cardiovascular diseases, has affinity for oxidized low density
                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-APR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW96844 standard; peptide;
10-JUN-1998;
                                                            17-DEC-1998.
                                                                                                                        WO9856938-A1
                                                                                                                                                                              Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Anti-coagulant; apolipoprotein B-100; apoB-100; metastatic spread; thromboplastin-mediated process; cancer; inhibitor; blood coagulation; anglogenesis; cellular differentiation; apoptosis; KRAD-14;
                                                        WPI; 1998-008798/01.
                                                                                                                                                                                                                                09-MAY-1996;
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14-MAY-1998;
                                                                                                                                                                    (UNLO ) ROYAL FREE HOSPITAL SCHOOL MED
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 KAEYKKOKHRH 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              50 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KAQYKKNIKHRH 12
                                                                                                              ₽,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hoogeveen
                                                                                                                                                                                                                                                                                      97WO-GB001255
                                                                                                                                                                                                                             96GB-00009702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 complex.
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98US-00079030.
                                                                                                              Ettelaie
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90.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       fragment.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Moore JP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 60; DB 2;
Pred. No. 0.0026;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  to LDL or VLDL lipoprotein - for gene therapy and antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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Peptide fragments of apo:lipo:protein B-100 with anticoagulant activity

Claim

60pp; English.

for treating or prev differentiation and

preventing coagulation, inhibiting angiogenesis, and apoptosis.

£#####555555555555555555555

This sequence is an example of the peptide of the invention. It has the CC formula (I), or their variants with one or more internal deletions, consertions or substitutions, while retaining anti-coagulant properties of CC apolipoprotein B-100 (apoB-100). Z1-KAO-XI-KKNKHHHS-X-T-Z2 [I) X1 = S or CC (aa); Z2 = the C terminus of the peptide, or 1-47 amino acids CC esparate or sequential treatment of cancer, particularly to prevent CC during or after surgery or in cases of heart attack, stroke etc.) and to CC inhibit angiogenesis, cellular differentiation or apoptosis. KRAD-14, CC factor VII on the surface of thromboplastion of the prothrombinase complex; and prevents activation of the prothrombinase complex; and prevents activation of the surface of thromboplastin and of platelets by thrombin. XX smaller than apoB-100, they act more quickly

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AAW96827-77 represent nucleic acid binding domains derived from human
                              Claim 16; Page 144-145;
                                        Composition comprising nucleic acid bound to LDL or VLDL lipoprotein -
                                                                                                                                           13-JUN-1997;
14-MAY-1998;
                                                                                     WPI; 1999-070331/06
                                                                                                                   (BAYU ) BAYLOR COLLEGE MEDICINE.
                                                                                                                                                                     10-JUN-1998;
                                                                                                                                                                                       17-DEC-1998.
                                                                                                                                                                                                                       Human apolipoprotein B-100; apoB-100; very-low density lipoprotein; VLDL; apolipoprotein; binding; in vivo transport; nucleic acid; binding domain; nuclear localisation sequence; gene therapy; cancer; cystic fibrosis; non-small cell lung carcinoma; diabetes; arteriosclerosis.
                                                                                                                                                                                                         WO9856938-A1
                                                                                                                                                                                                                                                                     Nucleic acid binding domain from apoB-100, residues 2930-3324.
                                                                                                                                                                                                                                                                                                        22-APR-1999
                                                                                                                                                                                                                                                                                                                                   AAW96831 standard; peptide; 394 AA
                                                                                                         'n,
                                                                                                     Hoogeveen
                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                      97US-00874807.
98US-00079030.
                                                                                                                                                               98WO-US011927.
                         293pp; English.
                                                                                                 RC, Moore JP;
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CC The present sequence is that of human apolipoprotein B. This non-cell CC disgnostic targets for hepatocellular carcinoma (HCC). Such proteins characterised as the products of genes identified by expression microarray analysis of the proteins of genes identified by expression microarray analysis of compared to the proteins of the protein on-tumour tissue when compared to HCC crelates to the detection of HCC by assaying patient samples such as the proteins of the presence and level of specific HCC crelated proteins. A finding of elevated levels of one or more of these proteins in a patient sample indicates that the patient has HCC methods as canning methods that employ non-cell-associated and cell-associated conductions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 8
ADJ57400
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                                                                                                                                                                                                                        Disclosure; SEQ ID NO 4; 48pp; English.
                                                                                                                                                                                                                                                  Detecting hepatocellular carcinoma (HCC) in mammals comprises obtaining and assaying a biological sample to quantify a cell-associated or a non-cell-associated HCC-related protein and comparing the quantity to a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                  WPI; 2004-142977/14.
GENBANK; NP_000375.
                                                                                                                                                                                                                                                                                                                                                                                 Katze M,
                                                                                                                                                                                                                                                                                                                                                                                                                             03-JUL-2002; 2002US-0393982P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-JUL-2003; 2003WO-US020841.
                                                                                                                                                                                                                                                                                                                                                                                                            (ILLU-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-JAN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hepatocellular carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2004005466-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human apolipoprotein B, marker for hepatocellular carcinoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-MAY-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADJ57400;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADJ57400 standard; protein; 2463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    apolipoprotein B-100 (apoB-100). ApoB-100 is a major apoprotein component of very-low density lipoproteins (VLDL), intermediate density lipoprotein sequence can be used in the composition of the invention. The present apolipoproteins for the binding and in vivo cransport of nucleic acids. The composition is used to deliver nucleic acids to entaryotic cells, in cancers (particularly non-small cell lung carcinoma), diabetes, cystic fibrosis and arreviced seconds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 394 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        leson.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          218 KAQYKKNKHRH 228
                                                                                                                                                                                                                                                                                                                                                                                                ILLUMIGEN BIOSCIENCES INC.
                                                                                                                                                                                                                                                                                                                                                                        Bumgarner R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 KAEYKKNKHRH 11
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10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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                                                                                                                                                                                                                                                                                                                                                                      Smit M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 marker; human; apolipoprotein B; diagnosis.
                                                                                                                                                                                                                                                                                                                                                               Rosenburg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 60; D
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0.023;
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48

KAQYKKNKHRH 58

1 KAEYKKNKHRH 11 ||:||||||| l Similarity 90.9

Query Match Best Local S Matches 10

95.2%;

Score 60; DB 2; Length 138; Pred. No. 0.0076; 1; Mismatches 0; Indels

0; Gaps

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SΧ

Sequence 2463

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Query Match

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ARSULT 9
AAY31237
ID AAY3
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                                                  This invention describes a novel method for the genetic treatment of hyperlipidemia by altering genes, in hepatocytes, for apoprotein (apo) B, E or Al. Low density lipoprotein (LDL) levels in the blood are reduced by altering an apo B gene (I) in a hepatocyte. The invention describes a method for the therapeutic and/or prophylactic method involving altering an apo B gene in hepatocytes by introducing the mutations Argi12Cys, Argi58Cys or Cysi58Arg and a method for ameliorating atheroscierosis by altering the apo Al gene in a hepatocyte so that the altered protein can dimerize. Altering expression of apo genes regulates levels of high and low density lipoprotein cholesterol. Altering expression of apo B, E and Al genes is used to treat or prevent atherosclerosis, coronary heart disease, Alzheimer's disease, hypobetalipoproteinemia, and dysbetalipoproteinemia. This sequence represents a fragment of the human Apo B protein described in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mutating apolipoprotein levels, e.g. for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-527333/44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Steer CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-FEB-1998;
30-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-AUG-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Apo B; Apo B; hyperlipidemia; human; treatment; hepatocyte; apoprotein; apo A; low density lipoprotein; LDL; blood; therapy; atherosclerosis; high density lipoprotein; HDL; cholesterol; coronary heart disease; high density lipoprotein; HDL; cholesterol; coronary heart disease; Alzheimer's disease; hypobetalipoproteinemia; dysbetalipoproteinemia.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-NOV-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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YESHIVA EINSTEIN COLLEGE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        75-83; 106pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0074497P.
98US-00108006.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
1. .3923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "Partial sequence, no start codon given'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /label=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95.2%;
90.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             genes in hepatocytes to control cholesterol or preventing hyperlipidemia, particularly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Аро в
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 60;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
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Sequence 3923 AA;

S

KAEYKKNKHRH 11

Query Match Best Local S Matches 10

Similarity

95.2%;

Score 60; DB 2; Pred. No. 0.31; Mismatches

Length 4536;

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Indels

<u>,</u>

Gaps

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10;

Conservative

Sequence

4536 AA;

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                                      CC This sequence represents the human apoliporptoein B-100 (apoB-100). CC Fragments of this sequence can be used in the poptide of the invention, cc which has the formula (I), or their variants with one or more internal cc deletions, insertions or substitutions, while retaining anti-coagulant properties of apolipoprotein B-100 (apoB-100). 21-KAQ-X1-KKWKHRHS-X2-T-Z2 (I); X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, or 1-CC (T); X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, or 1-CC (T); X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, or 1-CC (T); X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, or 1-CC (T); X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, or 1-CC (T) and to processes, separate or sequential treatment of cancer, particularly to prevent metastatic spread. They are also used to inhibit thromboplastin-CC (e.g. during or after surgery or in cases of heart attack, stroke etc.) and to inhibit angiogenesis, cellular differentiation or apoptosis. KRAD-CC (T) which is active as such or as part of a 98-aa peptide, inhibits activation of the prothrombinase complexe; and prevents activation of the prothrombinase complexe; and prevents activation of the prothrombinase complexe; and prevents activation of the surface of thromboplastin and of platelets by thromboplastin and of platelets by thromboplastin. Since (I) are much to the content of the prothrombinase complexes; and prevents activation of the surface of thromboplastin. Since (I) are much to the content of the c
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Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Peptide fragments of apo:lipo:protein B-100 with anticoagulant activity used for treating or preventing coagulation, inhibiting angiogenesis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 42-47; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bruckdorfer KR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAW41262
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Anti-coagulant; apolipoprotein B-100; apoB-100; metastatic spread; thromboplastin-mediated process; cancer; inhibitor; blood coagulation; angiogenesis; cellular differentiation; apoptosis; KRAD-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Apolipoprotein B-100
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           differentiation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      standard; peptide; 4536 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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90.9%;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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Best Local S
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          05-NOV-2002
                                                                                                AAU98981 standard;
                                                          AAU98981;
                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence represents human apolipoprotein B-100 (apoB-100). (VLDL), intermediate density lipoprotein (IDL), low density lipoproteins (IDL), index and lipoprotein a. The specification describes a composition that composition that localisation sequences (see AAM9687-77) and nuclear localisation sequences (see AAM96878-97) for use in the composition can nucleic acids to eukaryotic cells, in vivo or in vitro, for expressing a they are used for gene therapy of cancers (particularly non-small cell lung carcinoma), diabetes, cystic fibrosis and arteriosclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 4536 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Fig 1A-C; 293pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Composition comprising nucleic acid bound to LDL or VLDL lipoprotein used for delivering nucleic acid to cells for gene therapy and antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-070331/06.
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14-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BAYU ) BAYLOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAW96826;
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                                                                                                                                                                                                                                                              1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                              l Similarity
10; Conserv
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(first entry)
                                                                                                                                                                                                                                                                                                                      Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COLLEGE MEDICINE.
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98US-00079030.
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                                                                                        protein; 4560 AA
                                                                                                                                                                                                                                                                                                                                         95.2%;
90.9%;
                                                                                                                                                                                                                                                                                                      Score 60; DB 2;
Pred. No. 0.31;
1; Mismatches
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                                                                                                                                                                                                                                                                                         Gaps
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The invention relates to a method of inhibiting infection of a cell by virus capable of formating a complex with lipoprotein. The method comprises of preventing formation of and altering conformation of the complex to cantibody to receptor or binding of lipoprotein complex to complex to call receptor. (CR), blocking CR using CC soluble lipoprotein receptor, or downregulating low density lipoprotein receptor, or downregulating low density lipoprotein complex between the lipoprotein complex between the lipoprotein and collipse to the cell, which is capable of inducing a conformational change of a virus-lipoprotein complex. Alternatively, the method involves protein and collipse to the cell, which is capable of inducing a conformational change of a virus-lipoprotein complex. Alternatively, the method involves conformational change collipse included in the LDL-receptor binding domain of apoBluo, or anti-apolipoprotein (apol Blu) antibody which binds to an epitope included in the ligand binding domain of apoBluo, or anti-collepse antibody which binds to an epitope included in LDL receptor binding domain of apoBluo, or anti-collepse antibody which binds to an epitope included in LDL receptor binding composition of apoB. The method also involves introducing a peptide comprising conservation of apoBluo, or anti-collepse included in the lipand binding domain of LDL receptor binding domain of apoBluo, or anti-collepse included in the lipand binding domain of LDL receptor binding domain of apoBluo, or anti-collepse included in the lipand binding domain of LDL receptor binding domain of apoBluo, or anti-collepse included in the lipand binding domain of LDL receptor binding domain of apoBluo, or anti-collepse included in the lipand binding domain of apoBluo, or anti-collepse a
                                                                                                               Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Inhibiting infection of cell by virus capable of forming complex with lipoprotein, by preventing formation or altering conformation of complex, or blocking cell receptor for the complex using antibody to receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-583528/62.
3171 KAQYKKNKHRH 3181
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-OCT-2001; 2001WO-US050701.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (AGNE/) AGNELLO V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-JUN-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; low density lipoprotein receptor; LDLR; apolipoprotein E; apoE; virus-lipoprotein complex; apolipoprotein B100; apoB100; VSV; Flaviviridae virus; vesicular stomatitis virus; cholesterol metabolism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40200248388-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human apolipoprotein B100 (apoB100).
                                    1 KAEYKKNKHRH 11
                                                                                           10;
                                                                                                        Similarity
                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "Epitope region; specifically claimed in claim 11" 2980. 3084
                                                                                                    95.2%;
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                                                                      Score 60; DB 5;
Pred. No. 0.31;
1; Mismatches
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                                                                                                                                                                                                                                                                            The invention discloses a composition comprising two or more isolated rat CC or human polynucleotides or a polynucleotide which represents a fragment, CC derivative or allelic variation of the nucleic acid sequence. Also CC claimed are a vector comprising the novel polynucleotide, a host cell comprising the vector, a method for identifying a nucleotide sequence kit to perform the method, an array, a method for identifying an agent chat is differentially regulated in an animal subjected to pain and a compound that is differentially expressed in neuronal tissue of a first animal cc subjected to pain, a method for identifying an agent cc the expression of a polynucleotide sequence which is differentially expressed in an animal subjected to pain, a method for identifying a compound which regulates the expression of the polynucleotide sequence cc the expression of a polynucleotide sequence which is differentially compound that regulates the activity of one or more of the polynucleotides, a method for producing a pharmaceutical composition, a compound that regulates the activity in an animal of one or more of the polypeptides given in the cc activity in an animal of one or more of the polypeptides given in the cc polypeptides or their antibodies. The polynucleotide or the compound that compound that set activity is useful for preparing a medicament for treating pain (e.g. spinal segmental nerve injury (Chung), chronic constriction confuring a polypeptides or their antibodies. The polynucleotide or the constriction confuring the one or more of the sequence presented is a human protein (shown in Table 2 of the specification, which is differentially expressed during pain. Note: The sequence data for this patent did not form part of the printed cc ftra, who highed act sequences.
                                                                 Matches
                                                                                                                           Query Match
                                                                                                                                                                                                   Sequence 4561 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page; 1017pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New composition comprising two or more isolated polypeptides, useful for preparing a medicament for treating pain in an animal.
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01-NOV-2001; 2001US-0346382P.
26-NOV-2001; 2001US-0333347P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human Protein X04714, SEQ ID NO 14384
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                                                                                                                                                                                                                                                       ftp.wipo.int/pub/published_pct_sequences.
                                                                                                   Local
                                                             10; Conservative
   1 KAEYKKNKHRH 11
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BAYER AG.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002WO-US025765.
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                                                                                            95.2%;
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                                                             Score 60; DB 7
Pred. No. 0.31;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Costigan
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                                                                 Indels
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RESULT 15
ABR40253
ID ABR40
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AC ABR40
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AAO15893
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                                                                                                                                                                               Matches
                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                            Query Match
 ABR40253;
                                                                                                                                                                                                                                                                       The invention comprises methods of detecting the presence or absence of at least one allelic variant of a polymorphic region of a gene associated with cardiovascular disease. The invention specifically relates to detecting the region of a cytochrome C oxidase subunit VID (COX6B) gene that is associated with high serum cholesterol, or the region of the N-acetylglucosaminyl transferase component glycosylphosphatidylinosicol-1 (GPI-1) gene that is associated with low serum high density lipoprotein (HDL). The methods of the invention are useful for detecting a predisposition to high serum cholesterol, low serum HDL and cardiovascular disease. The methods are also useful for elucidating pathological pathways, developing diagnostic assays and new drug therapies for such disorders. The present amino acid sequence represents a human protein that is associated with high serum cholesterol, low serum HDL and/or cardiovascular disease
                                                                                                                                                                                                                                            Sequence 4563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; gene therapy; single nucleotide polymorphism; SNP; cytochrome C oxidase subunit VID; COX6B; high serum cholesterol; GPI-1; N-acetylglucosaminyl transferase component; cardiovascular disease; HDL; glycosylphosphatidylinositol-1; low serum high density lipoprotein.
                              ABR40253 standard; protein; 4563 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 158-168; 199pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Detecting the presence or absence of an allelic variant of a polymorphic region of COX6B and/or GPI-1 gene, useful for detecting a predisposition to high serum cholesterol, low serum HDL and cardiovascular disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Braun A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-MAR-2001; 2001US-00802640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAO15893 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-MAR-2002; 2002WO-US006728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-SEP-2002.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human apolipoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA015893;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SEQU-) SEQUENOM INC
                                                                                                                3174 KAQYKKNKHRH 3184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2002-750478/81.
DB; ABT13015.
                                                                                                                                                                             10;
                                                                                                                                               1 KAEYKKNKHRH 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KAQYKKOKHRH
                                                                                                                                                                             Conservative
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                                                                                                                                                                                             95.2%;
90.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4563 AA
                                                                                                                                                                                             Score 60; DB 5
Pred. No. 0.31;
                                                                                                                                                                               Mismatches
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CC length that is targeted to a novel compound that is 8-50 nucleotides in CC length that is targeted to a nucleic acid molecule encoding CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits competifically hybridises with an least an 8-nucleotide portion of an extive site on a nucleic acid molecule encoding ApoB; or which CC active setic, and cardiovascular activity. The compound may have a use in CC anoractic, and cardiovascular activity. The compound may have a use in CC animal having a disease or conditions associated with ApoB, e.g. a condition involving abnormal lipid metabolism, a condition involving an abnormal metabolism, atherosclerosis, or a condition (c) specifically Type 2 diabetes), obssity, atherosclerosis or coliyonucleotide is also useful for modulating serum glucose levels) in a human or diabetes (specifically VLDL, HDL or LDL) or serum triglyceride levels (specifically VLDL, HDL or LDL) or serum triglyceride levels (continuarly in a human. The antisense compound is also useful for with ApoB, or the onset of an increase in glucose levels, in the ansecciated with ApoB, or the onset of an increase in glucose levels in the animal or continuarion or delaying the onset of a disease or condition of the continuarion of the onset of an increase in glucose levels in the animal or continuarion of the onset of an increase in glucose levels in the animal or continuarion of the onset of an increase in glucose levels in the animal or continuarion of the cont
                                                                                        Query Match
Best Local S
Matches 10
                                                                                                                                                                       Sequence 4563 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense oligonucleotides for modulating apolipoprotein B, especially for preventing or treating atherosclerosis, hyperlipidemia diabetes, or for modulating glucose, cholesterol, lipoprotein or triglyceride levels.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Crooke RM, Graham MJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-AUG-2001; 2001US-00920033.
30-APR-2002; 2002US-00135985.
15-MAY-2002; 2002US-00147196.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JUL-2002; 2002WO-US024247.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; alipoprotein B; ApoB; antilipaemic; antiarteriosclerotic; antidiabetic; anorectic; cardiovascular; gene therapy; lipid metabolism; cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes; type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-FEB-2003
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         3174
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                                     1 KAEYKKNKHRH 11
                                                                          Similarity 90.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2003-268105/26.
DB; ACC62114.
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KAQYKKNIKHRH
                                                                                               95.2%;
                                                                   Score 60; DB 6; Pred. No. 0.31; 1; Mismatches
                                                                     0,
                                                                                                        Length 4563;
                                                                   Indels
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Search completed: January 12, 2005, 13:25:39 Job time : 103.484 secs

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Run on:

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Minimum
Maximum
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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88
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   protein search, using sw
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
               January 12, 2005, 13:14:21; Search time 25.9032 Seconds (without alignments) 28.162 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               478139 seqs, 66318000 residues
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Gapop 10.0 ,
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                         US-09-269-53A-1
US-09-180-422B-19
US-09-190-422B-12
US-09-190-30-83
US-09-079-030-214
US-09-180-422B-27
US-09-180-06C-1
US-09-180-422B-1
US-09-180-422B-6
US-09-180-422B-6
US-09-180-422B-1
US-09-180-422B-7
US-09-180-422B-7
US-09-180-422B-7
US-09-180-422B-7
US-09-180-422B-7
US-09-180-422B-7
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                                                                                             Sequence 1, Appli
Sequence 97, Appl
Sequence 97, Appl
Sequence 21, Appl
Sequence 214, Appl
Sequence 214, Appl
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 215, Appli
Sequence 18, Appli
Sequence 8, Appli
Sequence 10, Appli
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Sequence
Sequence
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Sequence
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Sequence
Sequence
Sequence
                           5, Appli
7, Appli
216, App
37552, A
52769, A
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US-09-180-422B-19
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                                    Sequence 19, Application US/09180422B
Sequence 19, Application US/09180422B
Patent No. 6444644

PATENTIAN BRUCKDORFER, KARL R
ETTELAIE, CAMILLE
TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED
FROM APOLIPOPROTEIN B-100
                                                                                                                                                                                                                                                                Matches
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: NIXON & VANDERHYE, P.C.
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Regult No.

	45	44	43	42	41	40	39	38	37	36	35	ω 4	ω	32	<u>ب</u>	30	29	28	
	37	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	39	
	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	60.3	60.3	60.3	60.3	61.9	
	913	913	913	913	601	601	598	410	340	208	207	156	141	491	345	308	215	9	
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ALIGNMENTS	US-09-232-468A-2	US-08-473-446-6	US-08-413-118-6	US-08-220-151-6	US-09-889-463A-10	US-09-252-991A-23280	US-09-538-092-1083	US-09-270-767-44592	US-09-270-767-43111	US-09-270-767-60040	US-09-270-767-61968	US-09-889-463A-8	US-09-328-352-7100	US-09-248-796A-19540	US-09-198-452A-89	US-09-248-796A-19781	US-09-134-001C-3249	US-09-180-422B-4	
	Sequence 2, Appli	Sequence 6, Appli	Sequence 6, Appli	Sequence 6, Appli	Sequence 10, Appl	Sequence 23280, A	Sequence 1083, Ap	Sequence 44592, A	Sequence 43111, A	Sequence 60040, A	Sequence 61968, A	Sequence 8, Appli	Sequence 7100, Ap	Sequence 19540, A	Sequence 89, Appl	Sequence 19781, A	Sequence 3249, Ap	Sequence 4, Appli	

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APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Halbert, Gavin
APPLICANT: Halbert, George
TITLE OF INVENTION: NO. 6670452-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.0
                                                                                                                                                                  US-09-269-533A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-269-533A-1
                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/09269533A Patent No. 6670452
                                                                                                                                                                          NAME/KEY: misc_feature
LOCATION: ()..()
OTHER INFORMATION: Apo B binding site sequence
                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                        LENGTH: 11
1 KAEYKKNKHRH 11
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1 KAEYKKNKHRH 11
                                                                               11;
                                                                                  Conservative
                                                                                                       100.0%; Score 63; DB 4; 100.0%; Pred. No. 0.00013;
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                                                                                    Mismatches
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                                                                                                                       Length 11;
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                                                                                    Gaps
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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
SOPTWARE: Patentin PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/079,030
CLASSIFICATION:
CONCURRENTY APPLICATION
THEORY APPLICATION
CONCURRENTY HEROEVER
APPLICATION NUMBER: US/09/079,030
CLASSIFICATION:
                                                                                                                                                                                                                                                                                    Sequence 97, Application US/09U/YUJU

Patent No. 6635623

GENERAL INFORMATION:
APPLICANT: Guevera, Jr., Juan G.
APPLICANT: Moogeven, Ron C.
TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
NAME: NOMILIAH, Nabeela R. REGISTRATION NUMBER: P-43,363 TELECOMMUNICATION, INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "MOLECULE TYPE: Peptide
"SEQUENCE DESCRIPTION: SEQ ID NO: 19:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 95.2%; Score 60; DB 4; Length 14;
Matches 10; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 229
CORRESPONDENCE ADDRESS:
ADDRESSE: Arnold, White & Durkee
STREET: P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-079-030-97
                                                                                                                                                                                                                          COUNTRY: US.
                                                                                                                                                                                                                                                    STREET: F.C. TTY: Houston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPAX: 7038164100
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
SOFTWARE: PatentIn PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
FILING DATE: 07-Dec-1998
ATTORNEY/ACENT INFORMATION:
REGISTRATION UNMBER: US/09/180,422B
ATTORNEY/ACENT INFORMATION:
REGISTRATION WIMBER: 187-268
TELEPHONE: 70381644000
TELEPHONE: 70381644000
TELEPAX: 7038164100
                                                                                                                                                                                                                                                  Texas
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STRANDEDNESS: single
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COUNTRY: USA
               ARAG: 003
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RESULT 5
US-09-079-030-83
; Sequence 83, Application US/09079030
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TOPOLOGY: 1 inear
MOLECULE TYPE: Peptide
US-09-180-4228-12
STRANDEDNESS SEQ ID NO: 12:
                                                                                                          Query Match
Best Local Similarity 95.2%; Score 60; DB 4; Length 138
Matches 10; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                               TELEPHONE: 7038164000
TELEFAX: 7038164100
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/180,422B
FILING DATE: 07-Dec-198
ATTORNEY/AGENT INFORMATION: «Unkinown»
NAME: SALOFF, B.J.
REGISTRATION NUMBER: 36663
TELECOMMUNICATION INFORMATION:
TELEPHONE: 7038164000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-180-422B-12
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Patent No. 6444644
GENERAL INFORMATION:
APPLICANT: BUCKDORFER, KARL R
ETTELAIE, CAMILLE
TOTAL R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 4
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Best Local Similarity 90.9%,
10; Conservative
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SEQUENCE CHARACTERISTICS: 1
LENGTH: 50 amino acids
TYPE: amino acids
STRANDEDNESS: 1
TOPOLOGY: linear
                                                                               48 KAQYKKNKHRH 58
                                                                                                      1 KABYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPTIER 22201

COMPTIER READABLE FORM,
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-CDS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSE: NIXON & VANDERHYE, P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED
                                                                                                                                                                                                                                                   LENGTH: 138 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 KAQYKKNKHRH 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Score 60; DB 4; Leng; Pred. No. 0.0018;
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                                                                                                                                     Length 138;
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                                                                                                      Gaps
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RESULT 6
US-09-079-030-214
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 394 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Guevers, Jr., Juan G.
APPLICANT: Hoogeveen, Ron C.
APPLICANT: Hoogeveen, Ron C.
APPLICANT: Moore, Paul J.
TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
NUMBER OF SEQUENCES: 229
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: McMillian, Nabeela R.
REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARAG:003
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/079,030
APPLICATION NUMBER: US/09/079,030
COMPUTER READABLE FORM:
MEDIUM TYPE: Flopy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/079,030
                                                                                                                                                                                                                                                                                                                                           APPLICANT: Guevera, Jr., Juan APPLICANT: Hoogeveen, Ron C. APPLICANT: Moore, Paul J.
                                                                                                                                                                                                                                                               TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF EUXARYOTIC CELLS
NUMBER OF SEQUENCES: 229
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                STREET: P.O. BO
CITY: Houston
STATE: Texas
                                                                                                                                                COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
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ZIP: 77210
                                                                                                                                                                                                                          ADDRESSEE: Arnold, White & Durkee STREET: P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Houston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         218 KAQYKKNKHRH 228
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                                                                                                                                                                   USA
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TOPOLOGY: linear;
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 27:
US-09-180-4228-27
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US-09-180-4228-27
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Best Local Similarity 90.9
Matches 10; Conservative
      Best Local Similarity Matches 10; Conserv
                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent No. 6444644
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 512/474-7577 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 27:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
ATTORNEY AGENT INFORMATION:
NAME: MCMIllian, Nabeela R.
REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
TOPOLOGY: 1i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/180,422B
FILING DATE: 07-Dec-1998
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME CENTER DATA
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                            NAMÉ: SADOFF, B.J.
REGISTRATION NUMBER: 36663
REFERENCE/DOCKET NUMBER: 1
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: BRUCKDORFER, KARL R
ETTELAIE, CAMILLE
TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED
FROM APOLIPOPROTEIN B-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: NIXON & VANDERHYE, P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                447 KAQYKKNKHRH 457
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                                                                                                                                                      TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: ARLINGTON STATE: VA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
                                                                                                                                                                                              LENGTH: 4536 amino acids
                                                                                                                                                                                                                                                       TELEPHONE: 7038164000
TELEFAX: 7038164100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/09180422B
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95.2%; Score 60; DB 4; Length 4536; 90.9%; Pred. No. 0.15; ative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95.2%;
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    Mismatches

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Pred. No. 0.028;
                                                                                                                                                                                                                                                                                                                  117-268
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3147

1 KAEYKKUKHRH 11

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RESULT 9
US-09-108-006C-1
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Patent No. 6524613
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 95.2%; Score 60; DB 4; Length 4536;
Matches 10; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY AGENT INFORMATION:

REGISTRATION NUMBER: P-43,363

TELECOMMUNICATION TELEPHONE: 512/418-300

INFORMATION FOR SEQ ID NO:

SEQUENCE CHARACTERISTICS:

LENGTH: 4536 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER; IEM ECCOMPATER
OPERATING SYTEM; Compatible
SOFTWARE; Patentin Release #1.0, Version #1.30
RPLICATION NUMBER: US/09/079,030
ATTORNEY/AGRNT TNEADMATTON.
                                                                        Bandyopadhyay, Paramita
NUMBER OF INVENTION: Hepatocellular Chimeraplasty
CORRESPONDENCE ADDRESS:
STREET: 300 Pheasant Run
                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 4536 amino
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
                                                                                                                                                                                APPLICANT: Steer, Clifford J. Kren, Betsy T.
                                                                                                                                                                                                                                                                                                            3147 KAQYKKNKHRH 3157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White & Durkee
STREET: P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-079-030-1
                                                         COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Guevera, Jr.
APPLICANT: Hoogeveen, R
APPLICANT: Moore, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    THE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
NAMED OF CHAPTON: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Houston
Texas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1, Application US/09079030
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Juan G.
                                                                                                                                                                                                                                                                                                                                       ,
                                                                                                                                                                                                                                                                                                                               Gaps
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                                                      CURRENT APPLICATION NUMBER: US/09/538,092
PRIOR APPLICATION NUMBER: US/09/538,092
PRIOR APPLICATION NUMBER: 60/127,352
PRIOR TILING DATE: 1999-04-01
PRIOR APPLICATION NUMBER: 60/178,965
PRIOR FILING DATE: 2000-02-01
NUMBER OF SEQ ID NOS: 1387
SEQ ID NO 942
LENGTH: 4563
                                                                                                                                                                                                                                                                                                 RESULT 10
US-09-538-092-842
                                TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                             Sequence 84
                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                         APPLICANT: Giot, Loic
APPLICANT: Mansfield, Traci A.
TITLE OF INVENTION: Protein-Protein Complexes and Method of Using Same
AME/KEY: misc_feature
OCATION: (0)...(0)
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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SEQUENCE CHARACTERISTICS:
LENGTH: 4563 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                               a 842 Application US/09538092
No. 6753314
INFORMATION:
                                                                                                                                                                                                                                                                                                                                             3174 KAQYKKNKHRH 3184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA
APPLICATION NUMBER: 60/054,288
FILING DATE: 30-APR-1997
FILING DATE: 30-APR-1997
APPLICATION NUMBER: 60/054,837
APPLICATION NUMBER: 60/054,837
APPLICATION NUMBER: 60/064,996
FILING DATE: 10-NOV-1997
APPLICATION NUMBER: 60/074,497
APPLICATION NUMBER: 60/074,497
APPLICATION NUMBER: POT US 98/08834
NAME: Friend THRORMATION:
NAME: Friend Thromac
                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: Protein
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Friebel. Thomas
REGISTRATION NUMBER: 29258
REFERENCE/DOCKET NUMBER: 7991-015-999
TELEPHONE: 215-504-4444
TELEPAC: 215-504-4545
                                                                                                                                                                                                                                                                                                                                                                     1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                             10;
                                                                                                                                                                                                                                                                                                                                                                                               Similarity 90.9
10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/108,006C
FILING DATE: 30-JUN-1992
CLASSIFICATION: <UNKNOWNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM
COMPATING SYSTEM: DOS
SOFTWARE: FASCEO for Windows Version 2.0
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95.2%; Score 60; DB 4; Length 4563; ative 1; Mismatches 0; Indels

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THER INFORMATION: Polypeptide Accession Number P04114

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RESULT 12
US-09-180-422B-11
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US-09-180-4228-9
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Sequence 11, Application US/09180422B
PATENT NO. 6444644
GENERAL INFORMATION:
APPLICANT: BRUCKDORFER, KARL R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 9, Application US/09180422B
PATENT NO. 6444644
GENERAL INFORMATION:
APPLICANT: BRUCKDORFER, KARL R
ETTELAIE, CAMILLE
                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 9: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: SADOFF, B.J.

REGISTRATION NUMBER: 36663
REFERENCE/DOCKET NUMBER: 117
TELECOMMUNICATION INFORMATION:
TELEPHONE: 7038164000
TELEFAX: 7038164100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/180,422B
FILING DATE: 07-Dec-1998
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                      NAME/KEY: Modified-site
LOCATION: 4
OTHER INFORMATION: /note= "Xaa can be Ser or Tyr"
SEQUENCE DESCRIPTION: SEQ ID NO: 9:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: NIXON & VANDERHYE, P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
CITY: ARLINGTON
                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3174 KAQYKKNKHRH 3184
                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED FROM APOLIPOPROTEIN B-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10; Conservative
                                                                                                                                                                                                        9
                                                                                                                                                                    KAEYKKOKKHRH 11
                                                                                                                                      KAQXKKOKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: USA
ZIP: 22201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: VA
                                                                                                                                                                                                                                                                                                                                                                                                                                              ENGTH: 12 amino acide
                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                      82.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95.2%;
                                                                                                                                                                                                    Score 52; DB Pred. No. 0.01

1; Mismatches
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Pred. No. 0.15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  117-268
                                                                                                                                                                                                                      DB 4;
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                                                                                                                                                                                                                                    Length 12;
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US-09-180-422B-1
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                                                                                                                                                                                                                                Sequence 1, Application US/09180422B
Patent No. 6444644
Patent No. 1016464
PATENT INFORMATION:
GENERAL INFORMATION:
GENERAL RECEIVER KARL R
ETTELAIE, CAMILLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION
STATE: VA
COUNTRY: USA
ZIP: 22201
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
COPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: NIXON & VANDERHYE, P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IOCATION: 13
OTHER INFORMATION: /note= "Xaa can be SEQUENCE DESCRIPTION: SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS: single TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                            TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED FROM APOLIPOPROTEIN B-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
TELEPHONE: 7038164000
TELEPAX; 7038164100
WATION FOR SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: SADOFF, B.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: NIXON & VANDERHYE,
STREET: 1100 NORTH GLEBE ROAD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ETTELAIE, CAMILLE
TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED
FROM APOLIPOPROTEIN B-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                   1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                               KAQXKKNKHRH 11
                                                                                                  CITY: ARLINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acids
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REFERENCE/DOCKET NUMBER: 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: /note= "Xaa can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/09/180,4228 FILING DATE: 07-Dec-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82.5%;
81.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 52; DB 4;
Pred. No. 0.011;
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, 8TH FLOOR
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COMPUTER READABLE FORM;
MEDIUM TYPE: Floppy disk
COMPUTER TYPE: Floppy disk
OPERATING SYSTEM; Compactble
SOPTWARE: Patent in Re-Dos/MS-Dos
APPLICATION DATA;
PLING DATE: Concurrently Herewith
CLASSIFICATTON TOTALE US/09/079,030
CLASSIFICATTON TOTALE US/09/079,030
                                                                                                                                                                                                                                                                                           NAME: MCM1111an, Nabeela R. REGISTRATION NUMBER: P-43,363
TELECOMMUNICATION INFORMATION: ARAG:
                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/ACENT INFORMATION:
NAME: MCMillian, Nabeels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence ... Sequence ... Sequence ... Sequence ... Season to 63564. Sequence ... S
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ADDRESSE: Arnold, White & Durkee
STREET: P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Guevera, Jr., Juan G.
APPLICANT: Hoogeven, Jr., Juan G.
APPLICANT: Hoogeven, Ron C.
TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
NUMBER OF ENQUENCES: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-180-422B-1 DESCRIPTION: /note= "Xaa represents Thr or Ile"
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COUNTRY: UC.
77210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 82.5%; Score 52; DB 4; Length 14;
Matches 9; Conservative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-079-030-204
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SEQUENCE CHARCID NO: 1:
LENGTH: 14 amino acid
STRANDENESS: single
MOLECULE TYPE: 11cs: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04, Application US/09079030
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 36663
TELECOMMUNICATION INFORMATION: 1:
TELEPHONE: 7038164000
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SOFTMARE: Patentin Release #1.0, Version #1.25
APPLICATION DATA:
FILING DATE: 07-Dec-1598
ATTORNEY/AGENT INFORMATION:
NAME: SADOFF, B.T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: Modified-site
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Search completed: January 12, 2005, 13 33 15
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US-09-180-422B-18

DESCRIPTION: SEQ ID NO: 18:
                                                                                                                                                                                                                                                                                                                                                                                Matches
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US-09-180-422B-18
i Sequence 16, Application US/09180422B
i Fatent NO. 6444644
i GENERAL INFORMATION.
APPLICANT: BRUCKDORFER, KARL R
TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED
FROM APOLIPOPROTEIN B-100
                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
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                                                                                                                                                                                                                                                                                           Local Similarity 81.0%; Score 51; DB 4; Length 14;
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MEDIUM TYPE: Floppy disk
COMPUTER SYSTEM:
COMPUTER: FLOPPY disk
OPERATIC: 18M PC COMPUTER:
SOFTWARE: Patentin PC-DOS/MS-DOS
APPLICATION DATA: Petentin Release #1.0, Version #1.25
FILING DATE: 07-Dec-1998
NAME: SADOFF, B.J.
DECTEMBRANCE, STANDOFF, B.J.
DECTEMBRANCE, STANDOFF, B.J.
                                                                                                                                                                                                                                           1 KAEYKKNKHRH 11
                                                                                                                                                                                    1 KAQSKKNKHRH 11
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US-09-079-030-204
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Best Local Similarity 82.5*; Score 52; DB 4; Length 18;
Matches 9; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS: 27
ADDRESSES: MICON & VANDERHYE, P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: SOUTH PROPERTY OF THE PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO.
SEQUENCE CHARACTERISTICS.
LENGTH: 18 amino acids
STRANDEDNESS:
TOPOLOGY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE:
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Minimum
Maximum
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Searched:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
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Perfect score:
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                                                                                                                                                                                                                                                                                                             Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB seq
        protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Published Applications AA:*

1: /cgn2 6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2 6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

3: /cgn2 6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

4: /cgn2 6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*

5: /cgn2 6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

6: /cgn2 6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*

7: /cgn2 6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*

9: /cgn2 6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

9: /cgn2 6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

9: /cgn2 6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
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                                                                                                                                                                                                                                 Query
Match
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63
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                      1608061 seqs, 361289386 residues
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Gapop 10.0 , Gapext 0.5
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Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                           /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10R_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
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 9 US-09-269-53JA-1

17 US-10-657-404A-1

15 US-10-333-313-2

15 US-10-333-313-5

15 US-10-333-313-5

10 US-09-870-759-128

10 US-09-802-640-32

10 US-09-802-640-32

10 US-09-751-708A-128

11 US-10-403-928-32

12 US-10-741-601-432

13 US-10-741-601-432

14 US-10-741-601-432

15 US-10-741-601-432

17 US-10-115-072-14
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Sequence 1, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 431, App
Sequence 128, App
Sequence 128, App
Sequence 32, Appl
Sequence 32, Appl
Sequence 32, Appl
Sequence 432, App
Sequence 134, App
Sequence 144, Appl
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	US-10-425-115-191644	09-925-300-944	-10-029-386-29	-10-425-115-3	-10-424-599-23499	-10-023-896-8	-10-023-896-6	-10-424-599-2	-10-205-428-3	-09-764-891-4	0-282-122A-51	-10-289-762-	-10-425-115-218	-10-437-963-17882	-10-425-115-326	-10-425-115-19872	-09-572-404B-84	-10-342-844-90	-10-425-115-	-10-424-599-	-10-437-96	-10-425-114-	-10-425-115-	-10-437-963-	-10-425-115-	-10-425-114-	-10-425-115-	-10-425-114-	-10-424-599-	-10-425-115-3247	-10-425-115-34363	US-10-679-032-52
•	e 191644	944, A	Sequence 29235, A	e 36	e 2349	e 88,	e 61,	e 24579	e 375, 🌶	e 4346,	e 51517,	о Т		Sequence 178827,	32633	e 198721,	e 845,	Φ	ю 		O	æ	equence :	æ		Sequence 68080, A	35781	Sequence 70425, A	e 2495	O	e 343636	2

ALIGNMENTS

US-09-269-533A-1

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FILE REFERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR PILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.0
SEQ ID NO 1
                                                                                                                                        TYPE: PRT
OTGANISM: Artificial Sequence
PEATURE:
NAME/KEY: misc_feature
LOCATION: ()...()
OTHER INFORMATION: Apo B binding site sequence
US-09-269-533A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/09269533A
Patent NO. US20020147304A1
GENERAL INFORMATION:
APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Owens, Moira
APPLICANT: Bailie, George
TITLE OF INVENTION: NO. US20020147304A1-Naturally Occurring Lipoprotein Particle
                                                           Matches
                                                                                                 Query Match
                                                                                                                                                                                                                                                                                          LENGTH:
                                                                               Local Similarity
1 KAEYKKNKHRH 11
                                                         11; Conservative
                                                                               100.0%; Score 63; DB 9; 100.0%; Pred. No. 0.0015;
                                                         0.
                                                         Mismatches
                                                           0;
                                                                                                   Length 11;
                                                           Indels
                                                         0;
                                                           Gaps
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RESULT 2 US-10-657-404A-1

Sequence 1, Application US/10657404A Publication No. US20040235730A1 GENERAL INFORMATION:

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APPLICANT: Narvanen, Outi
APPLICANT: Yla-Herttuala, Seppo
FILE APPLICANT: Yla-Herttuala, Seppo
FILE REFERENCE: GLE-G363
CURRENT APPLICATION NUMBER: US/10/333,313
FRIOR APPLICATION NUMBER: US/10/333,313
PRIOR APPLICATION NUMBER: US/10/333,313
PRIOR PILING DATE: 2003-01-15
PRIOR APPLICATION NUMBER: POT/GB01/03212

SOFTWARE: PEG ID NOS: 5
SEO ID NO: 5
SEO ID NO 2
TYPE: PRT
ORGANISM: Artificial Sequence
OTHER INFORMATION: Oligonantida
RESULT 4
US-10-333-313-5
                                                                          밁
                                                                                                  Query Match
Best Local Similarity 90.5%
Best Local Similarity 90.5%
Conservative
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US-10-333-313-2
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FRIOR APPLICATION NUMBER: PCT/GB97/02610
FRIOR FILING DATE: 1997-09-25
FRIOR APPLICATION NUMBER: PCT/GB97/02610
FRIOR APPLICATION NUMBER: GB 9620153.8
FRIOR FILING DATE: 1996-09-27
SOFTWARE: PATENTIA DOTE: 1996-09-27
SOFTWARE: PATENTIA VETSION 3.1
ILPN/mm. 1.
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Publication No. US20040091934A1
GENERAL INFORMATION:
APPLICANT. V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
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OTHER INFORWATION: Apo B binding site sequence
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TYPE: PRT
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APPLICANT: Halbert, Gavin
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ITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
ILE REFERENCE: P07885US-CIP
TO /10/657 404A
                                                                               1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 100.0%; Score 63; DB 17; es 11; Conservative 0; Mismarches
                                                     KAQYKKNKHRH 14
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Owens, Moira
                                                                                                         95.2%; Score 60; DB 15; Length 20; 90.9%; Pred. No. 0.008;
                                                                                                     Mismatches
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CURRENT APPLICATION NUMBER: US/10/741,601
CURRENT PILING DATE: 2003-12-22
NUMBER OF SEQ ID NOS: 26415
SOFTWARE: FAST-SEQ for Windows Version 4.0
SEQ ID NO 431
LENGTH: 3000
TYPE: PRT
ORGANISM: Homo sapiens
US-10-741-601-431
Sequence 128, Application US/09870759
Patent No. US20020177551A1

GENERAL INFORMATION: US20020171551A1

APPLICANT: TERMAN, David S
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT OF NEOPLASTIC DISEASE CURRENT APPLICATION NUMBER: US/09/870,759
CURRENT FILING DATE: 2002-01-14
PRIOR FILING DATE: 2002-05-30
PRIOR FILING DATE: 2000-05-30
NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin version 3.1
                                                                                                                                                                                                                                          US-09-870-759-128
                                                                                                                                                                                                                                                                     RESULT 6
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Best Local Similarity
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Publication No. US20040166519A1
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
FILE REFERENCE: CL001500
CIRDBENT ADMITSON: STENOSIS, METHODS OF DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-741-601-431
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Best Local Similarity 95.2%;
Matches 10; Conservative
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SEQ ID NO 5
LENGTH: 24
TYPE: PRT
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Publication No. US20040091934A1
GENERAL IMPORMATION:
APPLICANT: Narvanen, Outi
APPLICANT: Yla-Herttuala, Seppo
TITLE OF INVENTION: Peptides and Their Use in Assays for Cardiovascular Disease
CURRENT APPLICATION NUMBER: US/10/333,313
CURRENT APPLICATION NUMBER: 2003-01-15
CURRENT APPLICATION NUMBER: 2003-01-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: PCT/GB01/03212
PRIOR FILING DATE: 2001-07-18
NUMBER OF SEQ ID NOS: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: oligopeptide
                                                                                                                                                                                                                                                                                                 2126 KAQYKKNKHRH 2136
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90.9%;
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0.0096;
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US-09-751-708A-128
Sequence 128, Application US/09751708A
PUBLICATION NO. US20030157113A1
GENERAL INFORMATION:
APPLICANT: TERMAN, David S
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT OF NEOPLASTIC DISEASE
FILE REFERENCE: 751708
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; ORGANISM: Homo sapien
US-09-802-640-32
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US-09-802-640-32
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                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/751,708A
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: US 60/173,371
PRIOR FILING DATE: 1999-12-28
NUMBER OF SEQ ID NOS: 166
SOFTWARE: PatentIn version 3.1
SEQ ID NO 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 122
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 32
LENGTH: 4563
                                                              Matches
                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 95.2%;
Best Local Similarity 90.9%;
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Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                        TYPE: PRT
ORGANISM: Homo sapiens
-09-751-708A-128
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CURRENT APPLICATION NUMBER: US/09/802,640
CURRENT FILING DATE: 2001-03-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Braun, Andreas
APPLICANT: Bonsal Aruna
APPLICANT: Kleyn Patrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
                                                                                                                                                                        ENGTH: 4563
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3174 KAQYKKKIKHRH 3184
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                                                              10;
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                            KAEYKKOKHRH 11
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                                                              Conservative
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90.9%;
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Pred. No. 1.6;
1; Mismatches
                                                           Score 60; DB Pred. No. 1.6; 1; Mismatches
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Pred. No.
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                                                                                          10;
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                                                                                          Length 4563;
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                                                             Gaps
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RESULT 11

US-10-741-601-433
; Sequence 433, Application US/10741601
; Publication No. US20040166519A1
; Publication No. US20040166519A1
; GENERAL INFORMATION:
GENERAL INFORMATION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 10
US-10-741-601-432
(S-10-741-601-432)
; Sequence 432, Application US/10741601
; Publication No. US20040166519A1
; GENERAL INFORMATION:
; APPLICANT: CARGILM, Michele et al.
                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Marches 10; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: PRT ; ORGANISM: Homo sapiens US-10-741-601-432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: PRT; ORGANISM: Homo sapien US-10-403-902A-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-403-902A-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 26415
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/403,902A CURRENT FILING DATE: 2003-07-21 PRIOR APPLICATION NUMBER: 09/802,640 PRIOR FILING DATE: 2001-03-09 NUMBER OF SEQ ID NOS: 122 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 32, Application US/10403902A Publication No. US20030224418A1 GENERAL INFORMATION:
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FILE REFERENCE: CL001500
CURRENT APPLICATION NUMBER: US/10/741,601
CURRENT FILING DATE: 2003-12-22
NUMBER OF SEQ ID NOS: 26415
SOPTWARE: FASTSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE: CL001500
CURRENT APPLICATION NUMBER: US/10/741,601
CURRENT FILING DATE: 2003-12-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Braun, Andreas
APPLICANT: Bansal, Aruna
APPLICANT: Kleyn, Patrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE: 24736-2048B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: GENES AND POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: CARDIOVASCULAR DISEASE AND THEIR USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGTH: 4563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ENGTH: 4563
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les 10; Conserv
                                                                                                                                                                                                                                                                                                             3174 KAQYKKNKHRH 3184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3174 KAQYKKNKHRH 3184
                                                                                                                                                                                                                                                                                                                                                    1 KAEYKKNKHRH 11
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                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Michele et al.
GENETIC POLYMORPHISMS ASSOCIATED WITH
STENOSIS, METHODS OF DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                             95.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95.2%;
90.9%;
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Pred. No. 1.
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1.6;
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SEQ ID NO 433 LENGTH: 4563

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APPLICANT TERMAN, David S

FITE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT OF NEOPLASTIC DISEASE

FILE REFERENCE: 38173-189118 US/10/428,817A

FILE REFERENCE: 38173-189118 US/10/428,817A

FURRENT APPLICATION NUMBER: US/10/428,817A

PRIOR APPLICATION NUMBER: US 60/378,988

PRIOR FILING DATE: 2002-05-15

PRIOR FILING DATE: 2002-06-15

PRIOR FILING DATE: 2002-06-15

PRIOR PRICATION NUMBER: US 60/406,697

PRIOR APPLICATION NUMBER: US 60/406,750

PRIOR APPLICATION NUMBER: US 60/406,750

PRIOR APPLICATION NUMBER: US 60/406,750

PRIOR APPLICATION NUMBER: US 60/415,310

PRIOR APPLICATION NUMBER: US 60/415,310

PRIOR FILING DATE: 2002-10-01

PRIOR FILING DATE: 2002-10-02

PRIOR FILING DATE: 2002-10-02

PRIOR FILING DATE: 2002-10-02

PRIOR FILING DATE: 2002-10-02

PRIOR FILING DATE: 2003-01-09

SOFTWARE: DaTE-170 VAREE: US 60/438,686

NUMBER OF SEQ ID NOS: 224
                                                                                                                                                                                                                                                                                      RESULT 13
US-10-115-072-14
                                                                                                                                                                                                                                                                                                                                                                         В
    APPLICANT: NILSSON, JAN
APPLICANT: SHAH, PREDIMAN K.

TITLE OF INVENTION: PEPTIDE-BASED IMMUNIZATION THERAPY FOR TREATMENT OF
TITLE OF INVENTION: ATHEROSCLEROSIS AND DEVELOPMENT OF PEPTIDE-BASED ASSAY
FILE REFERENCE: 03940.0057
CURRENT APPLICATION NUMBER: US/10/115,072
PRIOR APPLICATION NUMBER: 000/281,410
PRIOR APPLICATION NUMBER: 600/281,410
PRIOR APPLICATION NUMBER: 600/281,410
PRIOR APPLICATION NUMBER: 5E 0101272-7
                                                                                                                                                                                                                                                  Sequence 14, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn version 3.2
SEQ ID NO 124
LENGTH: 4563
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 90;
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-428-817A-124
APPLICATION NUMBER: SE 0101232-7
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No. US20030105003A1
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o. US20040214783A1
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90.9%;
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Pred. No.
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RESULT 15
US-10-425-115-343636

VS-Quence 343636, Application US/10425115

Publication No. US20040214272A1

GENERAL INFORMATION:

APPLICANT: La Rosa, Thomas J.
APPLICANT: Kovalic, David K.
APPLICANT: Cao, Yongwei

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With CURRENT SPLICATIS: 38-21(53222)B

CURRENT APPLICATION NUMBER: US/10/425,115

NUMBER OF SEQ ID NOS: 369326

SEQ ID NO 343636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: NILSSON, JAN
APPLICANT: NILSSON, ROLAND
APPLICANT: CARLSSON, JENNY
APPLICANT: ERGTSON, JENNY
APPLICANT: STRANDBERG, LEIF
TITLE OF INVENTION: DEPTIDE-BASED PASSIVE IMMUNIZATION THERAPY FOR
FILE REFERENCE: 7303CIP
CURRENT APPLICATION UNMERS: US/10/679,032
NUMBER OF SEQ ID NOS: 79
SOFTWARE: Patentin Ver. 3.2
LENGTH: 20
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
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US-10-679-032-52
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Best Local (
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Publication No. US20040202653A1
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PRIOR APPLICATION NUMBER: SE 0103754-8
PRIOR FILING DATE: 2001-09-11
RUMBER OF SEQ ID NOS: 38
SOFTWARE: PATENTIN Ver. 2.1
SOFTWARE: PATENTIN Ver. 2.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Artificial Sequence
PEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KAQYKKNKH 20
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88.9%;
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Pred. No. 0.
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; LENGTH: 68
; TYPB: PRT
; ORGANISM: Zea mays
; PEATURE:
; OTHER INFORMATION: Clone ID: MRT4577_76558C.1.pep
US-10-425-115-343636

Query Match
Best Local Similarity 77.8%; Score 44; DB 17; Length 68;
Best Local Similarity 77.8%; Pred. No. 9.6;
Matches 7; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 3 EYKONGHRH 11
| | | | | | | | | |
Db 1 EHKCHKHRH 9

Search completed: January 12, 2005, 13:52:49
Job time: 89.3548 secs
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Title:
Perfect score
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45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
35	ω S	35	35	35	36	36	36	36	36	36	36	36	36	36	36
55.6	55.6	55.6	55.6	55.6	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1
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B84667	S77828	JC7997	S06571	S61173	S73852	T00034	E71318	T47423	G64647	D71936	T37282	AD1038	T24819	E60950	D65041
hypothetical prote	probable transcrip	nucleolar protein,	finger protein (cl	hypothetical prote	hypothetical prote	SART-1 protein - h	probable RNA polym	hypothetical prote	hypothetical prote	hypothetical prote	probable cathepsin	hypothetical prote	hypothetical prote	apolipoprotein B-1	hypothetical prote

ALIGNMENTS

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9-4132,'G',4134-4180,'E',4182-453 <chb> A;Cross-references: GB:J02610; NID:g178803; PIDN:J A;Note: a total of 2366 residues were confirmed by R;Protter, A.A.; Hardman, D.A.; Sato, K.Y.; Schill</chb>	A;Reterence number: A92556; MUID:87008488; PMID:37 A;Accession: A25266 A;Molecule type: mENA A;Residues: 1-97,'I',99-328,'V',330-644,'I',646-91	R;Chen, S.H.; Yang, C.Y.; Chen, P.F.; Setzer, D.; Tanimura, M.; Li, W.H.; Gotto J. Biol. Chem. 261, 12918-12921, 1986 A;Title: The complete cDNA and amino acid sequence of human apolipoprotein B-100	A,Residues: 1-617,'A',619-703,'P',705-792,'R',794-1270,'S',1272-1866,'G',1868-2036,'N',4189-4220,'M',4222-4563 <law> A,Note: the codons given for residues 704, 793, 1271, 2037, 2933, 3286, 3782, 4188, and</law>	A; lile: Human liver apolipoprocein B-100 cDNA: complete A; Reference number: A94134; MUID:87041416; PMID:3464946 A; Accession: A25267 A; Molecule type: mRNA	A; Restudes: 1-2/2; N ,2/4-61/; A, 613-121/; E, 1213-2091, V ,2093-2594, I ,2306-26/9; Q A; Cross-references: GB:X04506; NID:g34330; PID:G3428191.1; PID:g34331 R;Law, S.W.; Grant, S.M.; Higuchi, K.; Hospattankar, A.; Lackner, K.; Lee, N.; Brewer Jr Proc. Natl. Acad. Sci. U.S.A. 83, 8142-8146, 1986	A;Reference number: A93639; MUID:87016385; PMID:3 A;Accession: A25263 A;Molecule type: mRNA	A;Note: 1109-Asp was also found R;Knott, T.J.; Mallis, S.C.; Powell, L.M.; Pease, R.J.; Lusis, Nucleic Acids Res. 14, 7501-7503, 1986 A;Title: Complete cDNA and derived protein segmence of human ar	A;Title: The complete sequence and structural analysis of human apolipoprotein B-100: A;Reference number: A91058; MUID:87161758; PMID:3030729 A;Accession: A25679 A;Accession: A25679 A;Molecule type: mRNA A;Regidues: 1-11,15-2539,'S',2541-3823,'R',3825-4563 <cla></cla>	A; MOLECULE CYPE: UNA A; Rosidues: 1-617, 'A', 619-1929, 'F', 1931-3318, 'D', 3320-3426, 'T', 3428-3431, 'Q', 3433-3731, 'A; Residues: 1-617, 'A', 619-1929, 'F', 1931-3318, 'D', 3320-3426, 'T', 3428-3431, 'Q', 3433-3731, 'A; Cladaras references: UNIPROT: P04114; UNIPROT: P78482; UNIPROT: P78479; UNIPROT: Q9UMNO; UNIPROT: Q9UMNO; UNIPROT: Q9UMNO; UNIPROT: Q9UMNO; UNIPROT: Q18479; Cladaras, C.; Hadzopoulou-Cladaras, M.; Nolte, R.T.; Atkinson, D.; Zannis, V.I.	A; Title: DNA 6.372, 1987 A; Title: DNA 5.372, 1987 A; Reference number: A27850; MUID:88003974; PMID:3652907 A; Accession: A27850	C;Species: Homo sapiens (man) C;Species: Homo sapiens (man) C;Date: 28-Dec-1987 #sequence revision 28-Dec-1987 #text change 09-Jul-2004 C;Accession: A27850; A25679; A25263; A25267; A25266; A24320; A24684; A23817 4452; I61909; I59510; I39474; I39469; I84624; I37179; PS0058	LPHUB apolipoprotein B-100 precursor - human N.Contains, anolipoprotein B-26, anolipoprotein B-24		55.6 227 2 B84	35 55.6 123 2 86117 35 55.6 138 2 80657 35 55.6 217 2 JC799 35 55.6 224 2 87782	36 36 57.1 416 2 G64647 37 36 57.1 565 2 T47423 38 36 57.1 611 2 E71318 39 36 57.1 800 2 T00034 40 36 57.1 1818 1 S73852
,4182-4563 <chbs ,="" 02610;="" by="" confirmed="" d.a.;="" direct="" h<="" hort,="" j.w.;="" k.y.;="" m.;="" nid:g178803;="" of="" peptides="" pid:g178804="" pidn:aaa35549.1;="" residues="" sato,="" schilling,="" sequencing="" td="" tryptic="" were="" y.j.;="" yamanaka,=""><td>59943 8, 'P',920-3318,'D',3320-3426,'T',3428-</td><td>. H.</td><td>1270,'S',1272-1866,'G',1868-2036,'N',2071, 2037, 2933, 3286, 3782, 4188, and</td><td>mplere nucreic acid and derived amino 64946</td><td>7-2091, V.,2093-2364, I.,2366-2679, V. A28191.1; PID:934331 x, A.; Lackner, K.; Lee, N.; Brewer Jr</td><td>63409</td><td>o found .C.; Powell, L.M.; Pease, R.J.; Lusis, A.J.; Blackhart, B.; McCa. r501-7503, 1986 nd derived protein seguence of human apolipoprotein B-100.</td><td>ysis of human apolipoprotein B-100: re 30729 63 <cla></cla></td><td>320-3426,'T',3428-3431,'Q',3433-3731,' ; UNIPROT:P78479; UNIPROT:Q9UMNO; UNIP LT.; Atkinson, D.; Zannis, V.I.</td><td>alacı, L.; Korcler, C.; Knocc, T.; Sco B gene. 52907</td><td>; A25774;</td><td></td><td></td><td>hypothetical prote</td><td>hypothetical prote finger protein (cl nucleolar protein, probable transcrip</td><td>hypothetical prote hypothetical prote probable RNA polym SART-1 protein - h hypothetical prote</td></chbs>	59943 8, 'P',920-3318,'D',3320-3426,'T',3428-	. H.	1270,'S',1272-1866,'G',1868-2036,'N',2071, 2037, 2933, 3286, 3782, 4188, and	mplere nucreic acid and derived amino 64946	7-2091, V.,2093-2364, I.,2366-2679, V. A28191.1; PID:934331 x, A.; Lackner, K.; Lee, N.; Brewer Jr	63409	o found .C.; Powell, L.M.; Pease, R.J.; Lusis, A.J.; Blackhart, B.; McCa. r501-7503, 1986 nd derived protein seguence of human apolipoprotein B-100.	ysis of human apolipoprotein B-100: re 30729 63 <cla></cla>	320-3426,'T',3428-3431,'Q',3433-3731,' ; UNIPROT:P78479; UNIPROT:Q9UMNO; UNIP LT.; Atkinson, D.; Zannis, V.I.	alacı, L.; Korcler, C.; Knocc, T.; Sco B gene. 52907	; A25774;			hypothetical prote	hypothetical prote finger protein (cl nucleolar protein, probable transcrip	hypothetical prote hypothetical prote probable RNA polym SART-1 protein - h hypothetical prote

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A;Molecule type: mRNA
A;Residues: 'N',3729-3731,'I',3733-3875,'A',3877-3948,'F',3950-3963,'Y',3965-3982,'S',A;Chen,S:H.; Habib,G:; Yang,C:Y:; Gu,Z:W:, Lee,B:R.; Meng,S:; Silberman,S:R.; Caller 238,363-366,187, Crying Gu,Z:W:,Lee,B:R.; Meng,S:; Silberman,S:R.; Caller Apolipoprotein B-48 is the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with an organ-specific in the product of a messenger RNA with a messenger RNA with a messenger RNA with a messenger RNA with a me
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R;Wel, C.F.; Chen, S.H.; Yang, C.Y.; Marcel, Y.L.; Milne, Proc. Natl. Acad. Sci. U.S.A. 82, 7265-7269, 1985
A;Reference number: A24738; MUID:86042646; PMID:2932736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Molecule type: mRNA
A;Residues: 3846-4298 <SHO>
A;Residues: 3846-4298 <SHO>
R;Pfitzner, R; Wagener, R; Stoffel, W.
Biol. Chem. Hoppe-Seyler 367, 1077-1083, 1986
A;Title: Isolation, expression and characterization of a l
A;Accession: A25572
A;Accession: A25572
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A; Residues: 4219-4337, 'S', 4339-4563 <PFI>
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A; Rolecule type: mRNA
A; Residues: 709-791, 'SSSWKAASHGCPHSAGD', 810-906 < DEE>
A; Cross-references: GB: K03175; NID: g178821; PIDN: AAA51759.1;
A; Cross-references: C:: Olofsson, S:O:; Bjursell, G.
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/Title: Analysis of the human apolipoprotein B gene; cc
/Reference number: A91565; MUID:87191999; PMID:2883086
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roc. Natl. Acad. Sci. U.S.A. 82, 4983-4986, 1985
Title: A partial CDNA clone for human apoliprotein B.
PACCESSION: A25774; MUID:85270450; PMID:3860836
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;Residues: 485-617;A, 619-1044 <LA2>
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;Pross-references: GB.M12480; NID:g178791; PIDN:AAA51751.1; PID:g178792
;Protter, A.A.; Hardman, D.A.; Schilling, J.W.; Miller, J.; Appleby, V.; Chen, G.C.; X:
;Toc. Matl. Acad. Sci. U.S.A. 83, 1467-1471, 1986
;Fitcle: Isolation of a cDNA clone encoding the amino-terminal region of human apolipopy
;Accession: A23817
;Accession: A23817
;Molecule type: mRNA
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alysis of cDNA clones encoding the entire B-26 region of human apolipoproteir
number: A24320; MUID:86287319; PMID:3461454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . B cDNA. Evidence for more than
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A, Molecule type: protein
A, Residues: 873-892'K', 894-896 < LE1>
A, Residues: 873-892'K', 894-896 < LE1>
A, Residues: 873-892'K', 894-896 < LE1>
A, Molecule type: protein
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A, Residues: 3113'L', 3115-3130', R', 3132-3133', P', 3135-3136', R' < LE2>
A, Residues: 3113'L', 3115-3130', Percenti, V.R.; Caiati, L.; Onasch, M.A.; Wallis Riole Chem. 261', 13564-15367', 1986
A, Reference number: A92564', MUID:87057153', PMID:2946672
Biol. Chem. Hoppe-Seyler 368', 419-425', 1987
A, Reference number: A90715', MUID:872771140', PMID:2886136
A, Contents: annotation; gene structure
J. Reference number: A90715', MUID:872771140', PMID:2886136
J. Reference number: A92605', MUID:87280197', PMID:3301850
A, Reference number: A92605', MUID:87280197', PMID:3301850
A, Reference number: A92605', MUID:87280197', PMID:3301850
A; Contents: annotation: henarin hinding and disnifide hond
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R; LeBoeuf,
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A;Title: Human apolipoprotein B: partial amino acid sequence.
A:Reference number: A22006; MUID:84208786; PMID:6373369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: mRNA
A; Residues: 2169-2179 <HOS>
A; Note: the sequence shown represents the carboxyl end of apolipoprotein B-48
A; Note: two RNA species, 14.1kb and 7.5kb in length, were isolated from the human che encodes the 250K apoB-48; CAA encoding 2180-Gln is substituted by the stop codo
Broc. Natl. Acad. Sci. U.S.A. 87; Seg. B.; Yang, M.; Gotto Jr., A.M.
A; Ritle: Isolation and characterization of sulfibydryl and disulfide bonds
A; Contents: disulfide bonds
A; MID: 90319144; PMID: 215173
A; Molecule type: Driftin
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A;Residues: 3056-3159 <MEH>
A;Residues: 3056-3159 <MEH>
A;Cross-references: GB;X03045; NID:928783; PIDN:CAA26850.1; PID:9929609
A;Cross-references: GB;X03045; N.; Law, S.W.; Meglin, N.; Brewer Jr., H.B.
Biochem. Biophys. Res. Commun. 148, 279-285, 1987
A;Title: Identification of a novel in-frame translational stop codon in human intestine
A;Reference number: A29659; MUID:88049670; PMID:2445342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;Molecule type: protein
;Residues: 28-41;76-97,'1',99-100;175-193;206-215;239-249;259-266;357-399;455-490;512-5
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A;Experimental source: intestine
A;Note: this mRNA from intestine includes a stop codon created by RNA editing in play
R;Mehrabian, M.; Schumaker, V.N.; Fareed, G.C.; Mest, R.; Johnson, D.F.; Kirchgessne
Nucleic Acids Res. 13, 6937-6953, 1985
A;Title: Human apolipoprotein B: identification of cDNA clones and characterization
A;Reference number: A24269; MUID:86041888; PMID:3903660
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A;Residues: $1.75;101-110;129-139;158-174;197-207,276-287;298-304;306-314;526-532;538-5
A;Residues: $1.75;101-110;129-139;1601-1610;1647-1661;1697-1724;1770-1781;1859-1897;38-5
A;Noce: these fragments were derived from apo48
B;Chardman, D.A.; Protter, A.A.; Schilling, J.W.; Kane, J.P.
Biochem. Biophys. Res. Commun. 149, 1214-1219, 1987
A;Title: Carboxyl terminal analysis of human B-48 protein confirms the novel mechanism parameter. A28002; MUID:88106542; PMID:3426612
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A;Molecule type: mRNA
A;Molecule type: mRNA
A;Residues: 2165-2179 <CH1>
A;Cross-references: GB:M18036; NID:gl78799; PIDN:AAA51754.1; PID:gl78800
A;Accession: MRNA includes the stop codon of the organ-specific mRNA for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cysteines at positions 1112, 1422, 1505, 1662, 3761, uf, R.C.; Miller, C.; Shively, J.E.; Schumaker, V.N.; tt. 170, 105-108, 1984
                                                                                                                                                                                                                                                                                                                                                                                                                                   Onasch, M.A.; Wallis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3917, and 4217 have free su
Balla, M.A.; Lusis, A.J.
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son, D.F.; Kirchgessner,
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C;Accession: S32802
R;Pape, M.E.; Castle, C.K.; Murray, R.W.; Funk, G.M.; Hunt, C.E.; Marotti, K.R.; Melchic Biochim. Biophys. Acta 1086, 326-334, 1991
A;Title: Apo B metabolism in the cynomolgus monkey: evidence for post-transcriptional re A;Reference number: S32802; MUID:92075708; PMID:1742325
A;Accession: S32802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 2
S32802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R; Dashti, N.; Lee, D.M.; Mok, T.

Blochem. Blophys. Ree. Commun. 137, 493-499, 1986
A; Title: Apolipoprotein B is a calcium binding protein.
A; Reference number: A90125; MUID:86242245; PMID:3087360
A; Contents: annotation; calcium binding
R; Carlsson, P.; Olofsson, S.O.; Bondjers, G.; Darnfors, C.;
Nucleic Acids Res. 13, 8813-8826, 1985
A; Title: Molecular cloning of human apolipoprotein B cDNA.
A; Reference number: 137178; MUID:86093680; PMID:3841204
A; Accession: 137180
                                                                                                                                                                                                                                             J. Lipid Res. 31, 1109-1120, 1990
A,TItle: A cross-species comparise
A,Reference number: A60950, MUID:
A,Recession: C60950
                                                                                                                                                                                                        A; Molecule type: DNA
A; Residues: 1-269 < LAW>
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                                                                                                                                                                                                                                                                                                                       R; Law, A.; Scott, J.
                                                                                                                                                                                                                                                                                                                                                                                 apolipoprotein B-100 - golden hamster (fragment) C;Species: Mesocricetus auratus (golden hamster)
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A; Residues: 1-596 < PAP>
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¡Species: Macaca fascicularis (crab-eating macaque)
¡Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
                                                                                                                                                                                    Cross-references: UNIPROT: Q60537; UNIPROT: Q60536
                                                                                                                                                                                                                                                                                                                                           Accession:
                                                                                                                                                                                                                                                                                                                                                             ;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;Superfamily: apolipoprotein
                                                                                            Query Match
Best Local :
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Best Local
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  KAQYKKORDRH
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                                                                          Conservative
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                                                                                        76.2%;
72.7%;
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19
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90.9%;
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81.8%;
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Pred. No. 0.06
1; Mismatches
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                                                                                        Score 48; DB 2
Pred. No. 0.56;
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                                                                                                            DB 2;
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0.063;
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                                                                                                          Length 269;
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RESULT 4

Local Similarity

76.2**%**; 72.7**%**;

Score 48; Pred. No.

DB 2; 3.3;

Length 1778

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A; Molecule type: DNA
A; Residues: 1-1778 < MAE>
A; Residues: 1-1778 < MAE>
A; Cross-references: UNIPROT: Q29020; UNIPROT: Q29433
R; Maeda, N.; Ebert, D.L.; Doers, T.M.; Newman, M.;
Gene 69, 213-229, 1988
A; Title: Molecular genetics of the apolopoprotein E
A; Reference number: 146567
A; Accession: 146567
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A;Note: this is a revision to the sequence from reference JH0101
R;Smith, T.J.; Hautamaa, D.; Maeda, N.
Gene 87, 309-310, 1990
A;Introns: 39/3; 88/3; 159/2; 238/3; 1133/1; 1171/2; 1232/3
A;Note: the list of introns may be incomplete
C;Superfamily: apolioporotein B
C;Keywords: atherosclerosis; cholesterol metabolism; LDL; lipid binding;
                                                                                                                                                                                                                                                                                              A;Status: translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-8,'S',10-238 <MA2>
A;Cross-references: GB:M22646; NID:g164366; PIDN:AAA30996.1;
A;Accession: I46568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;Maeda, N.; Ebert, D.L.; Doers, T.M.; Newman, M.; Hasler Gene 70, 213-229, 1988
A;Title: Molecular genetics of the apolipoprotein B gene A;Reference number: JT0382; MUID:89108006; PMID:2905687
A;Accession: JT0382
                                                                                                                                                             A;Residues: 239-1778 <MA3>
A;Cross-references: GB:M22647; NID:g164367; PIDN:AAA30997.1; PID:g164370
C;Comment: Apolipoprotein B is the predominant protein component of the low-density lipo;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          apolipoprotein B - pig (fragments)
c;Species: Sus scrofa domestica (domestic pig)
C;Date: 31-Mar-1992 #sequence revision 31-Mar-1992 #text_change 09-Jul-2004
C;Accession: JT0382; I46567; I46568
C;Accession: JT0382; I46567; I46568
R;Maeda, N.; Ebert, D.L.; Doers, T.M.; Newman, M.; Hasler-Rapacz, J.; Attie
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C; Superfamily: apolipoprotein B
C; Keywords: atherosclerosis; calcium;
F;435-445/Region: receptor binding
F;646-656/Region: receptor binding
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C;Species: Mesocricetus auratus (golden hamster)
C;Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 09-Jul-2004
C;Accession: JH0102
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A; Residues: 1-779 < SMI>
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72.7%;
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Matches

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R/Law, A.; Scott, J.
J. Lipid Res. 31, 1109-1120, 1990
A;Title: A cross-species comparis.
      A; Accession:
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C:Species: Oryctolagus cuniculus (domestic rabbit)
C:Date: 31-Dec-1993 #sequence_revision 09-Sep-1994 #text_change
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A60950
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A;Residues: 1-274 <LAW>
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J. Lipid Res. 31, 1109-1120, 1990
A;Title: A cross-species comparise
A;Reference number: A60950; MUID:
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C;Species: Rattus norvegicus (Norway rat)
C;Date: 31-Dec-1993 #sequence_revision 09-Sep-1994 #text_change 07-Oct-1994
             Reference number: A60950;
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C; Superfamily:
                                                                                                                                                                                                                                                                                    Query Match
Best Local (
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;Superfamily: apolipoprotein B
;Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: UNIPROT:Q29021; GB:L11235; NID:g164371; PIDN:AAA74655.1; PID:g951375
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A; Residues: 1-2629 < PUR >
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A;Title: Nucleotide sequence encoding the carboxyl-terminal half of apolipoprotein B A;Reference number: 146569; MUID:94014802; PMID:8409766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R; Purtell,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       apolipoprotein B - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 09-Jul-2004
C;Accession: 146569
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                                                                                                                                                                                                                                 1 KAEYKKNKHRH 11
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comparison of the apolipoprotein 50; MUID:90324804; PMID:2373961
                                                                                                                                                                                                                                                                            71.4%;
63.6%;
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50; MUID:90324804; PMID:2373961
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72.7%;
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Pred. No.
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Pred. No. 4.7;
2; Mismatches
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             domain that binds
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hypothetical protein At2927670 [imported] - Arabidopsis thaliana C;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 02-Feb-2001 #sequence_revision 02-Feb-2001 #text_change 09-Jul-2004 C;Accession: E84675 #sequence_revision 02-Feb-2001 #text_change 09-Jul-2004 R;Accession: E84675 #sequence_revision 02-Feb-2001 #text_change 09-Jul-2004 R;Lin, X.; Kaul, S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; M.; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.E.; Umayam, L. euss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.I. Nature 402, 761-768, 1999
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E84675
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                                                                                                                                                                                                                                                                                                                                                                                                                 C.Superfamily: apolipoprotein B
C.Keywords: atheroselerosis; calcium; cholesterol metabolism; chylomicron;
F;435-445/Region: receptor binding
F;646-656/Region: receptor binding
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A:Cross_references: MGI:88052
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A;Molecule type: mRNA
A;Residues: 427-531,'S',533-700 <LAW>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Accession: JH0101
A;Molecule type: DNA
A;Residues: 1-784 <SMI>
A;Cross-references: UNIPROT:Q61314; GB:M35186
R;Smith, T.; Hautamaa, D.; Maeda, N.
submitted to the EMBL Data Library, May 1989
A;Accession: S33128
A;Accession: S33128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Title: A cross-species comparison of the A;Reference number: A60950; MUID:90324804;
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R;Law, A; Scott, J.
J. Lipid Res. 31, 1109-1120, 1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Species Mus musculus (house mouse)
C;Date: 17-Apr-1993 #sequence revision 17-Apr-1993 #text_change
C;Accession: JH0101; S33128; D60950
R;Smith, T.J.; Hautamaa, D.; Maeda, N.
Gene 87, 309-310, 1990
A;Title: Sequence of the putative low-density lipoprotein recept
A;Reference number: JH0101; MUID:90236327; PMID:2332175
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A;Residues: 1-274 <LAW>
A;Residues: 1-274 <LAW>
A;Cross-references: UNIFROT:07M2U9
A;Note: authors translated the codon GAT for residue 155 as His
C;Superfamily: apolipoprotein B
C;Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron; glycoprotein,
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         S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y. fat, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.E.; Umayam, L.; Tallon, J., W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter,
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Pred. No. 11;
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4.3;
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and analysis of

chromosome

2 of the plant Arabidopsis thaliana

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Curr. Top. Microbiol. Immunol. 154, 125-169, 1990 A;Title: Analysis of the protein-coding content of A;Reference number: S09749; MUID:90269039; PMID:21 A;Accession: S09828
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A; Title: Drosophila TAF-II 150: similarity A; Reference number: A54063; MUID:94233377; A; Accession: A54063
ई
                                                                                                                       A;Cross-references: UNIPROT:P17148; EMBL:X17403; NID:g59591; PIDN:CAA35380.1; PID:g17808
A;Note: this sequence was submitted to the EMBL Data Library, December 1989
A;Note: this reading frame extends between two stop codons and does not begin with a sta
                                                                                                                                                                                                                                                                                                           hypothetical protein UL65 - human cytomegalovirus (strain AD169)
C;Species: human cytomegalovirus, human herpesvirus 5
A;Note: host Homo sapiens (man)
C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 09-Jul-2004
C;Accession: S09828
R;Chee, M.S.; Bankier, A.T.; Beck, S.; Bohni, R.; Brown, C.M.; Cerny, R.; Horsnell,
M.; Barrell, B.G.
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A;Residues: 1-1213 <VER>
A;Cross-references: UNIPROT:Q24325; GB:X79243; NID:g541664; PIDN:CAA55830.1;
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A;Residues: 1-221 <STO>
A;Cross-references: UNIPROT:Q9ZUW9; GB:AE002093; NID:g3860265; PIDN:AAC73033.1; GSPDB:GN
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A;Accession: E84675
A;Status: preliminary
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•Стояв-references: FlyBase:FBgn0011836
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;Map position: 2
                                                                                                          ;Superfamily: cytomegalovirus tegument protein
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Best Local
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                                  Similarity 7; Conserv
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                                                    61.9%;
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Pred. No.
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Pred. No.
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PMID:8178153
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RESULT 14
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T20958
                                                                          RESULT 15
$44617
$44617
$C50C3.11 protein - Caenorhabditis elegans
$C;Species: Caenorhabditis elegans
$C;Date: 20-Feb-1995 #sequence_revision 20-
$C;Accession: $44617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;anonymous, The C. elegans Sequencing Consortium.

Science 282, 2012-2018, 1998
A;Title: Genome sequence of the nematode C. elegans: a platform for investigating biolog
A;Reference number: A75000; MUID:99069613; PMID:9851916
A;Note: see websites genome.wustl.edu/gsc/C_elegans/ and www_sanger.ac.uk/Projects/C_ele
A;Note: published errata appeared in Science 283, 35, 1999; Science 283, 2103, 1999; and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein F15A4.1 [imported] - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 10-May-2001 #sequence_revision 10-May-2001 #text_change 09-Jul-2004
C;Accession: H88337
submitted to the EMBL Data A; Description: Sequence of A; Reference number: $44627
                                                            R; Favello, A.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references:
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A; Residues: 1-452 < STO>
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A; Residues: 1-365 <WIL>
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A;Accession: S44617
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-734 <FAV>
A;Cross-references: UNIPROT:P34374; EMBL:L14433; NID:g289649; PID:g289650
C;Genetics:
A;Cross-references: UNIPROT:P34374; EMBL:L14433; NID:g289649; PID:g289649; PID:g289650
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A;Cross-references: UNIPROT:P3447374; EMBL:L14433; NID:g289649; PID:g289649; PID:g289650
C;Genetics:
A;Cross-references: UNIPROT:P34474; EMBL:L14433; NID:g289649; PID:g289650
C;Genetics:
A;Cross-references: UNIPROT:P34474; EMBL:L14433; NID:g289649; PID:g289650
C;Genetics:
A;Cross-references: UNIPROT:P34474; EMBL:L14433; NID:g289649; PID:g289650
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2: uniprot_trembl:*
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Gapop 10.0 , Gapext 0.5
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63
1 KAEYKKNKHRH 11
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Copyright (c) 1993 - 2005 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Q7yqn0 tachyglossu	Q7yqp2 panthera le	Q7m2u9 oryctolagus	Q7yqw8 caluromys p	Q8ib88 plasmodium	Q7tma5 rattus norv	Q7yr06 lama glama	Q7yqm7 pteropus hy	Q7yqr2 alces alces	_	Q7yqq3 elephantulu	Q7yqp0 vulpes vulp		Q7yqq0 procavia ca	

ALIGNMENTS

APB_HUMAN ID APB HUMAN APB HUMAN TO APB HUMAN AC P044I14; 000502; Q13787; DT 01-NOV-1986 (Rel. 03, Created) DT 01-NOV-1986 (Rel. 03, Last sequence update) DT 05-JUL-2004 (Rel. 44, Last annocation update) DE Apolipoprocein B-100 precursor (Apo B-100) [Contains: Apolipoprotein B-48 (Apo B-48)]. GN Name-APOB; ON Homo sapiens (Human). OC Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo. OX NCB1_TaxID=9606; RN [1] RP SEQUENCE FROM N.A. RX MEDLINE=87016385; PubMed=3763409;	Ol-JUN-2003 (TrEMBLrel. 24, APOB protein (Fragment). Name=APOB; Homo sapiens (Human). Eukaryota; Metazoa; Chordat; Mammalia; Eutheria; Primate; NCBI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=8719199; PubMed=28; Carlsson P., Darnfors C., O. "Analysis of the human apol; the B-74 region."; Gene 49:29-51(1986). EMBL; M15421; AAA51758.1; - PIR; A7850; LPHUB. GO; GO:0005576; C:extracell; GO; GO:0005319; F:lipid tran GO; GO:0005319; F:lipid tran GO; GO:0006869; P:lipid tran GO; GO:	RESULT 1 Q13788 ID Q13788; PRELIMINARY; PRT; 3262 AA. AC Q13788; PRELIMINARY; PRT; 3262 AA. DT 01-NOV-1996 (TrEMBLrel. 01, Created) DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)

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SEQUENCE OF 1-291 FROM N.A.

MEDIJINS=86149325; PubMed=3513177;

Protter A.A., Hardman D.A., Schilling J.W., Miller J.,

Chen G.C., Kirsher S.W., McEnroe G., Kane J.P.;

"Isolation of a cDNA clone encoding the amino-terminal
                                                                             Mahley R.W., Scott J.,
"Human apolipoprotein B:
of gene expression, and c
Science 230:37-43(1985).
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Bjursell G.:
                                                                                                                       Knott T.J., Rall S.C. Jr., Indexy-Wilson B., Powell L.M., Priestley L.M., Robertson E.,
                                                                                                                                                                                                                                                                          Mehrabian M., Schumaker V.N., Fareed G.C., We Kirobgessner T.G., Lin H.-C., Many X., Ma Y., Characterization of mRNA. "Human apolipoprotein B: identification of cDN Nucleic Acids Res. 12-72.";
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Carlsson P., Olofsson ...
Bjursell G.,
"Molecular cloning of human apolipoprotein
"Molecular Cloning of human apolipoprotein
"Alaic Acids Res. 13:8813-8826 (1985).
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"The complete sequence and B-100: relationship betweer EMBO J. 5:3495-3507(1986).
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Zannis V.I.
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MEDLINE=87161758; PubMed=3030729;
Cladaras C., Hadzopoulou-Cladaras
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                                                                                                                                                                                                                                                                                                                                                            DLINE=85270450; PubMed=3860836;
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partial cDNA clone for human apolipoprotein B
oc. Natl. Acad. Sci. U.S.A. 82:4983-4986(1985)
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B., McCarthy B.
DNA and derive
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S.C. Jr., Innerarity T.L., Jacobson S.F.
S.C. Jr., Pease R.J., Eddy R., Nakai
Obertson E., Rall L.B., Betsholtz C., (
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.M., Higuchi K., Hospattankar A.V.,
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                                                                                of carboxyl-terminal localization.";
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                                                                             "Association between a sp
defective apolipoprotein
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                                          VARIANT LEU-2739.
MEDLINE=91016974;
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MEDLINE=89098975; Pul
Soria L.F., Ludwig E
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MEDILINE=20143590; PubMed=16679026;
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MEDLINE=91071750; PubMed=1979313;
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Cunny G., Cambien F., Roizes G.;
                                                                                                                                                                                                                                                                             triglycerides.";
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Innerarity T.L., Blackhart B., Taylor W.R., Marcel Y., Milne R.,
Johnson D., Fuller M., Lusis A.J., McCarthy B.J., Mahley R.W.,
Levy-Wilson B., Scott J.;
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human apolipoprotein B.";
Nature 323:734-738(1986).
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                                      PubMed=2216805;
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Rieder M.J., Carrington D.P., da Ponte S.H., Has Rieder M.J., Kuldanek S.A., Rajkumar N., Toth E., Nickerson D.A.;

Nickerson D.A.;

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GO; GO:0005319; F:lipid transporter activity; IE GO; GO:0006869; P:lipid transport; IEA.

InterPro; IPR001747; Lipid_transprt_N.
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Mammalia; Eutheria;
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01-OCT-2003 (TrEMBLrel. 25,
01-OCT-2003 (TrEMBLrel. 25,
01-MAR-2004 (TrEMBLrel. 26,
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Leren T.P., Bakken K.S., Hoel V., Hjermann I.,
"Screening for mutations of the apolipoprotein
hypocholesterolemia.";
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MEDLINE=97403938; PubMed=9259199;
Rabbes J.P., Varret M., Saint-Jore B., Erlich D.,
Krempf M., Giraudet P., Junien C., Boileau C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Poirier O., Ricard S., Behague I., Souriau C., Evans A.E.,
Arveiler D., Margues-Vidal P., Luc G., Roizes G., Cambien F.;
"Detection of new variants in the apolipoprotein B (Apo B) gene
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VARIANT FDB CYS-3558.
                                                                                                                                                      NCBI_TaxID=9606;
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Primates;
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01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-JUN-2096 (TrEMBLrel. 24, Last annotation update)
Apoliopprotein B (Fragment).
Macaca pascicularis (Crab eating macaque) (Cynomolgus monkey).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
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Q7YQR5;
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Platyrrhini; Cebidae;
MCBI_TaxID=57176;
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Pfam; PF01347; Vitellogenin_N;
SMART; SM00638; LPD_N; 1.
                    Pape M.E., Castle C.K., Murray R.W., Marotti K.R., Melchior G.W.;
"Apo B metabolism in the cynomolgus transcriptional regulation.";
                                                                                                          Cercopithecinae;
NCBI_TaxID=9541;
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EMBL; AF548396; AAP97352.1; -.
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01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
          Biochim.
                                         MEDLINE=92075708; PubMed=1742325; Pape M.E., Castle C.K., Murray R.W., Marotti K.R., Melchior G.W.;
                                                                            SEQUENCE FROM N.A. TISSUE-Liver;
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RESULT 7
Q7YR14
ID Q7YR AC Q7YR
AC Q7YR
DT 01-C
DT 01-
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Q7YQQ2
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Best Local S
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                                                                                                                                               QYR14;
QYR14;
QYR14;
Q1-CCT-2003 (TrEMBLrel. 25, Created)
01-CCT-2003 (TrEMBLrel. 25, Last sequence update)
01-CCT-2003 (TrEMBLrel. 25, Last annotation update)
Apolipoprotein B (Fragment).
Rhinolophus creaghi.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Chiroptera; Microchiroptera; Rhinolophidae;
Rhinolophinae; Rhinolophus.
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Best Local
  SEQUENCE FROM N.A.
MEDLINE=22761261; PubMed=12878460;
Amrine-Madsen H., Koepfli K.-P., Wayne R.K., ;
"A new phylogenetic marker, apolipoprotein B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NON_TER
NON_TER
SEQUENCE
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Amrine-Madsen H., Koepfli K.-P., Wayne R.K.,
"A new phylogenetic marker, apolipoprotein B,
evidence for eutherian relationships.";
Mol. Phylogenet. Evol. 28:225-240(2003).
EMBL; AF548409; AAP97365.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. MEDLINE=22761261; Amrine-Madsen H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Orycteropus afer (Aardvark).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Tubulidentata; Orycteropodidae; Orycteropus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-OCT-2003
01-OCT-2003
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01-0CT-2003
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Submitted (FEB-1992) to the EMBL/GenBank/DDBJ
EMBL; X15737; CAA33755.1; -.
PIR; S32802; S32802.
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TISSUE=Liver;
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9; Conserv
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596
596 AA;
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596
1 66757 MW;
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81.8%;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Last
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                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B13BBA74E25C3120
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                                                                                                                                                                                                                                                                                                                                                                                                                                   445 AA.
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     Springer M.S
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Best Local S
Matches 9
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Query Match
Best Local S
Matches 9
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01-OCT-2003 (TrEMBLrel. 25,
01-OCT-2003 (TrEMBLrel. 25,
01-OCT-2003 (TrEMBLrel. 25,
                                                                                                                                                                                           Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                   Apolipoprotein B 100
Name=apoB-100;
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NON_TER
NON_TER 3.
SEQUENCE 30.
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OTYOP9,
OTYOP9,
O1-OCT-2003 (TrEMBLrel. 25, Created)
O1-OCT-2003 (TrEMBLrel. 25, Last sequence update)
O1-OCT-2003 (TrEMBLrel. 25, Last annotation update)
O1-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                                           NCBI_TaxID=55050;
                                                                                                                                                                           Ictonyx striatus (striped polecat).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Butheria; Carnivora; Fissipedia; Mustelidae; Mustelinae;
                                                                                                                                                                                                                                                                                                                                                                      Q7YQN8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.

MEDILINE=22761261; PubMed=12878460;

Amrine-Madsen H., Koepfil K.-P., Wayne R.K., Partine-Madsen H., Koepfil K.-P., Wayne R.K., Partine-Madsen H., Koepfil K.-P., Wayne R.K., Partine-Madsen H., Koepfil K.-P., Wayne R.K., Partine-R.K., 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Name=apoB_100;
Name=apoB_100;
Echinops telfairi (Lesser hedgehog tenrec).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Insectivora; Tenrecidae; Tenrecinae; Echinops
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Mol. Phylogenet. Evol. 28:225-240(2003)
EMBL; AY243371; AAP50759.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity 81.0
9; Conservative
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9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                               KAQYKKNKGRH
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304
304 AA;
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445
445 AA;
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; 34264 MW;
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445
49395 MW;
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81.8%;
                                                                                                                                                                                                                                                                   (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                             58
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Last
                                                                                                                                                                                                                                                                                                                          Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 50; DB 2; Length 304;
Pred. No. 1.2;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 51; DB
Pred. No. 1.2;
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                                                                                                                                                                                                                                                                                   sequence up
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Q7YQP3;
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01-OCT-2003
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Q7YQN9;
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01-OCT-2003
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SEQUENCE
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MEDLINE=22766.261; PubMed=12878460;

MEDLINE=22766.261; PubMed=12878460;

Amrine-Madsen H., Koepfil K.-P., Wayne R.K.

"A new phylogenetic marker, apolipoprotein

evidence for eutherian relationships.";

Mol. Phylogenet. Evol. 28:225-240(2003).

EMBL; AF548420; AAP97376.1;
                       MEDINE-22761261; PubMed-12878460; Amrine-Madeen H., Koepfli K.-P., Wayne R.K. "A new phylogenetic marker, apolipportein evidence for eutherian relationships."; Mol. Phylogenet. Evol. 28:225-240(2003). EMBL; AF548424; AAP97380.1; -.
                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa;
Mammalia; Eutheria;
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Lipoprotein.
NON_TER 1 1 1
NON_TER 314 314
                                                                                                                                                                                                                                                                                                               Zalophus californianus (California sealion).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Eutheria; Carnivora; Pinnipedia; Otariidae;
                                                                                                                                                                                                                                                                                                                                                                                                               Apolipoprotein B 100
Name=apoB-100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nandinia binotata (African palm civet).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Carnivora, Fissipedia, Viverridae, Nandiniinae,
   Lipoprotein.
                                                                                                                                                                                                                                                                              NCBI_TaxID=9704;
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Name=apoB-100;
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-OCT-2003 (TrEMBLrel. 25, Last sequence update)
-OCT-2003 (TrEMBLrel. 25, Last annotation update)
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Similarity 72.7%;
8; Conservative
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316 AA;
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tein B 100 (Fragment).
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314 AA;
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34540 MW;
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72.7%;
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Pred. No. 2.9;
2; Mismatches
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Pred. No.
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                                                                                                            e R.K.,
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2.9;
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Q7YQP7;
01-OCT-2003
01-OCT-2003
Lipoprotein.
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Name-apoB-100;

Nyctimene albiventer (Common tube-nosed fruit bat).

Nyctimene albiventer (Common tube-nosed fruit bat).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Chiroptera; Megachiroptera; Pteropodidae;

Pteropodinae; Nyctimene.

NCBI_TaxID=48988;
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NON_TER
NON_TER '
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                                             MEDLINE=22761261; PubMed=12878460;
Amrine-Madsen H., Koepfli K.-P., Wayne R.K.,
"A new phylogenetic marker, apolipoprotein B,
evidence for eutherian relationships.";
mol. Phylogenet. Evol. 28:225-240(2003).
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01-OCT-2003 (TrEMBLrel. 25,
01-OCT-2003 (TrEMBLrel. 25,
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Q7YQM8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ochotona princeps (Southern American pika).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Lagomorpha; Ochotonidae; Ochotona.
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                                   EMBL; AF548435; AAP97391.1;
                                                                                                     SEQUENCE FROM N.A.
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45696 MW;
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318
34888 MW;
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72.7%;
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72.7%;
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el. 25, Last annotation update)
(Fragment).
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                                                                                Springer M.S.;
                                                                     provides compelling
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RESULT 15
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ID QTYR0
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DT 01-OC
DT 0
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ID QTYQR
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DT 01-0C
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OS Balae
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Best Local Similarity
Matches 8; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
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                                                                                                                              SEQUENCE FROM N.A.

MEDILINE-22761261; PubMed=12878460;
Amrine-Madsen H., Koepfli K.-P., Wayne R.K.,
"A new phylogenetic marker, applipoprotein B,
evidence for eutherian relationships.";
Mol. Phylogenet. Evol. 28:225-240(2003).
EMBL; AY243383; AAP50771.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q7YQR4;
Q7YQR4;
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Apolipoprotein B 100 (Fragment).
Name=apoB-100;
Name=apoB-100;
Vartabrata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q7YR04 PRELIMINARY; PRT; 438 AA.
Q7YR04;
01-OCT-2003 (TrEMBLrel. 25, Created)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Apolipoprotein B (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rousettus amplexicaudatus (Common rousette).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Chiroptera; Megachiroptera; Pteropodidae;
Pteropodinae; Rousettus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lipoprotein.
NON_TER
NON_TER 4
SEQUENCE 43
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MEDLINB=22761261; PubMed=12878460;

Amrine-Madsen H., Koepfli K.-P., Wayne R.K., S
"A new phylogenetic marker; apollipoprotein B,
evidence for eutherian relationships.";
Mol. Phylogenet. Evol. 28:225-240(2003).

EMBL; AF548397; AAP97353.1;
                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=58083;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Balaena mysticetus (Bowhead whale).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Cetacea; Mysticeti; Balaenidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=27602;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KAEYKKNKHRH 11
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8; Conserv
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438
438 AA;
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438
438 AA;
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ilarity 72.7%;
Conservative
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   48597 MW;
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72.7%;
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Pred. No. 4.1;
2; Mismatches
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Pred. No. 4.1;
41C890DEAF95C872 CRC64;
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4.1;
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                                                                                                                                                                                                                                             Springer M.S.;
, provides compelling
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, provides compelling
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                             Query Match
Best Local S
Matches 8
76
           1 KAEYKKNKHRH 11
                            8; Conserv
KAQYKKNKDKH
                            Conservative
                                    76.2%;
72.7%;
86
                           Score 48; DB 2
Pred. No. 4.1;
2; Mismatches
                                          2
                                          Length 438;
                            Indels
                           0,
                           Gaps
                           <u>;</u>
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Search completed: January 12, 2005, 13:30:53 Job time : 110.645 secs

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                      Database
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Perfect score:
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A Geneseq_23Sep04:*
1: geneseqp1990s:*
2: geneseqp1990s:*
3: geneseqp2001s:*
4: geneseqp2001s:*
5: geneseqp2003s:*
6: geneseqp2033s:*
7: geneseqp2003bs:*
8: geneseqp2004s:*
                                                                                                                                                                                                                                                                                                                                                                                                              BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-657-404A-2
54
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                                                                                                                                                                                                                                                                                                                                                     2002273 seqs, 358729299 residues
                                                                                                                                                                                                                                                                                                                                                                                        Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTRLTRKRGLK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                        Gapext 0.5
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	88	IJ	Description	tion
_	54	100.0	11	2	AAW57205	Aaw57205 A	A :
2	54		13	N	AAW57207	Aaw57207	Аро В
w	54	100.0	15	N	AAW96892	Aaw96892	ApoB-1
4.	54	100.0	20	σ	ABJ37575	Abj37575	
S	54	٠	22	N	AAW57208	Aaw57208	
6	54		22	N	AAW57209	Aaw57209	Аро в
7	54	•	34	S	AAE14541	Aae14541	Human
8	54		36	N	AAW96876	Aaw96876	Nucle
9	54	100.0	37	N	AAW64587	Aaw64587	
10	54		51	N	AAW96845	Aaw96845	Nucle
11	54		343	4.	ABB37687	Abb37687	
12	54	100.0	343	4	ABG52504	Abg52504	
13	54	100.0	377	N	AAR72704	Aar72704	
14	54	٠	377	N	AAR34031	Aar34031	Seque
15	54		2463	8	ADJ57400	Adj57400	-
16	57	100.0	3923	N	AAY31237	Aay31237	Human
17	54		4536	N	AAW41262	Aaw41262	Apoli
18	54	•	4536	N	AAW96826	Aaw96826	
19	54	•	4560	S	AAU98981	Aau98981	Human
20	54	100.0	4561	7	ADD48677	Add48677	Human
21	54	•	4563	u	AA015893	Aao15893	Human
22	54	100.0	4563	σ	ABR40253	Abr40253	
23	54	100.0	4563	σ	ABU79140	Abu79140	Apoli
24	54	•	アソコマ			Adf43408	
		1	1000	7	ADF43408		

The present sequence represents a specifically claimed Apo B binding site peptide which can be used as a component of a non-naturally occurring, receptor-competent low density lipoprotein (LDL) particle of the present invention. The LDL particle comprises at least 1 peptide component that has at least 1 binding site for an apo B protein receptor and at least 1 lipophilic substituent. Also described in the invention are peptides containing an apo B binding sequence with at least 70% identity with sequences: KAEYKONKHRH (1) or TRLTRKRGLK (2), or their dimers. Non-naturally occurring, receptor-competent LDL particles are useful as: (i) drug-targeting vectors for delivering anticancer drugs to cancer cells that express an apo B protein receptor, and (ii) additives for cell culture media especially as growth supplements. Non-naturally occurring,

Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells

WPI; 1998-230637/20.

Claim 12; Page 52; 73pp; English.

that express this receptor.

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	
44	44	44	44	44	44	44	44	44	44	45	45	45	45	45	49	54	54	54	54	
81.5	81.5	81.5	81.5	81.5	81.5		81.5	81.5	81.5	83.3	83.3	83.3	83.3	83.3	90.7	100.0	100.0	100.0	100.0	
12	11	11	11	11	11	10	10	10	10	10	10	10	10	10	15	4590	4563	4563	4563	
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AAW41260	ADF56451	ABU07938	AAE21732	AAW87717	AAW57206	AAY30688	AAY30686	AAY30692	AAY30690	AAG94441	AAG94535	AAG94401	AAY30687	AAY30682	AAW41261	AAU33184	ADO33447	AD033445	ADH18870	
Aaw41260	Adf56451 1	Abu07938	Aae21732	Aaw87717	Aaw57206	Aay30688		Aay30692	Aay30690			Aag94401	Aay30687	Aay30682	Aaw41261 .	Aau33184	Ado33447	Ado33445	Adh18870	
Apolipopr	Human apo	Apoprotei	BSMR effe	Analogue	Аро В 100	Apo-B100	Apo-B100	Apo-B100	Apo-B100	Human com .	Human com	Human com	Apo-B100	Apo-B100	Apolipopr		Human apo	Human apo	Human apo	

ALIGNMENTS

RESULT 1 AAW57205

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Apo B; binding site; receptor; cancer; drug delivery; anticancer; growth supplement; non-natural lipid particle; low density lipoprotein; LDL; receptor component; apo B100 receptor site.
                                                                                                                                            Halbert GW,
                                                                                                                                                                       27-SEP-1996;
                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                                                                                                 03-AUG-1998 (first entry)
                                                                                                                                                                                                                                                                                               AAW57205;
                                                                                                                                                                                                                                                                                                            AAW57205 standard; peptide; 11
                                                                                                                                                         (UYST ) UNIV STRATHCLYDE.
                                                                                                                                                                                    25-SEP-1997;
                                                                                                                                                                                                 02-APR-1998
                                                                                                                                                                                                              WO9813385-A2.
                                                                                                                                                                                                                                                                   Apo B binding site peptide 2.
                                                                                                                                            Owens MD,
                                                                                                                                                                       96GB-00020153
                                                                                                                                                                                    97WO-GB002610.
                                                                                                                                            Baillie
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CC Site peptide analogue which can be used as a component of a non-
CC naturally occurring, receptor-competent low density lipoprotein (LDL)
CC particle of the present invention. The LDL particle comprises at least 1
CC peptide component that has at least 1 binding site for an apo B protein
CC receptor and at least 1 lipophilic substituent. Also described in the
CC invention are peptides containing an apo B binding sequence with at least
CC dimers. Non-naturally occurring, receptor-competent LDL particle save
CC useful as: (i) drug-targeting vectors for delivering anticancer drugs to
CC cancer cells that express an apo B protein receptor, and (ii) additives
CC cocurring, receptor-competent LDL particles are
CC cocurring, receptor-competent LDL particles do not require the complete
CC apo B sequence, which is large and tends to aggregate, to provide binding
CC affinity to an apo B protein receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 2
AAW57207
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                                                                                                                                                                                                                        Claim 13; Fig 7; 73pp; English.
                                                                                                                                                                                                                                    Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells that express this receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                            WPI; 1998-230637/20.
                                                                                                                                                                                                                                                                                                                                   Halbert GW, Owens MD,
                                                                                                                                                                                                                                                                                                                                                                                                                   25-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                     (UYST)
                                                                                                                                                                                                                                                                                                                                                                                            27-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9813385-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Apo B; binding site; receptor; cancer, drug delivery; anticancer; growth supplement; non-matural lipid particle; low density lipoprotein; LDL; receptor component; apo B100 receptor site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Apo B 100 binding site peptide analogue peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW57207 standard; peptide; 13 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 11 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               receptor-competent LDL particles do not require the complete apo B sequence, which is large and tends to aggregate, to provide binding
                                                                                                                                                                                                                                                                                                                                                             UNIV STRATHCLYDE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                Baillie G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 54; DB 2; Length 11; 100.0%; Pred. No. 0.0022;
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J.0022;
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   AAW96878-97 represent nuclear localisation signal sequence derived from human apolipoprotein B-100 (apoB-100). ApoB-100 is a major apoprotein component of very-low density lipoproteins (VLDL), intermediate density present sequence can be used in the composition of the invention. The specification describes a composition that comprises LDL and lipoprotein a. The apolipoproteins for the binding and in vivo transport of nucleic acids. The composition is used to deliver nucleic acids to eukaryotic cells, in cancers (particularly non-small cell lung carcinoma), diabetes, cystic fibrosis and arteriosclerosis
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Sequence 15 AA;
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Best Local S
Matches 11
                                                                                                                                                                                                                                                                                                                                                                                                     Claim 19; Fig 13D; 293pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Composition comprising nucleic acid bound to LDL or VLDL lipoprotein - used for delivering nucleic acid to cells for gene therapy and antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-070331/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Guevara JG, Hoogeveen RC, Moore JP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-JUN-1997;
14-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (BAYU ) BAYLOR COLLEGE MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human apolipoprotein B-100; apoB-100; very-low density lipoprotein; VLDL; apolipoprotein; binding; in vivo transport; nucleic acid; binding domain; nuclear localisation sequence; gene therapy; cancer; cystic fibrosis; non-small cell lung carcinoma; diabetes; arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-APR-1999
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98US-00079030.
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Query Match Best Local S Matches

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Matches 11
                                                                                                                    Apo B; binding site; receptor; cancer; drug delivery; anticancer; growth supplement; non-natural lipid particle; low density lipoprotein; LDL; receptor component; apo B100 receptor site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a novel ligand for binding a target biomolecule, which comprises a peptide having at least one sulphated or sulphonated amino acid and at least one amino acid chosen from neutral and positively charged amino acids. The novel ligands can be used for the treatment of e.g. tumours, rheumatoid arthritis, diabetic retinopathy and hypoxia. This sequence represents a heparin binding peptide relating to the
                                                                                                                                                                                                        Apo B 100 binding site peptide analogue peptide
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(UYZU-)
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Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Heparin binding peptide sequence #28
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UNIV ZURICH.
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                                       Location/Qualifiers
/note= "attached to retinoic acid"
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Pred. No. 0.004;
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affinity
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                                                                                                                                                                                                                                                                                                                                                                                                              Apo B; binding site; receptor; cancer; drug delivery; anticancer; growth supplement; non-natural lipid particle; low density lipoprotein; LDL; receptor component; apo B100 receptor site.
                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Apo B 100 binding site peptide analogue peptide D
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                                                                                      WO9813385-A2
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Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B protein receptor
                                                                                                                                                                    "attached to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Baillie G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 54; DB 2;
Pred. No. 0.0044;
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                                                                                                                                                                    retinoic acid"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 22;
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(UYST) UNIV STRATHCLYDE

GW,

Owens MD,

Baillie

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25-SEP-1997;

97WO-GB002610. 96GB-00020153

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RESULT 7
AAE14541
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present sequence represents a specifically claimed Apo B 100 binding CC site peptide analogue which can be used as a component of a non-competent low density lipoprotein (LDL) CC particle of the present invention. The LDL particle comprises at least 1 creptor and at least 1 lipophilic substituent. Also described in the CC invention are peptides containing an apo B binding sequence with at least 1 CC dimers. Non-naturally occurring, receptor-competent LDL particles are cell call that express an apo B protein for delivering anticancer drugs to CC cancer cells that express an apo B protein receptor, and (ii) additives and CC cocurring, receptor-competent LDL particles are CC cocurring, receptor-competent LDL particles are CC cocurring, receptor-competent LDL particles are cell culture media especially as growth supplements. Non-naturally CC apo B sequence, which is large and tends to aggregate, to provide binding caffinity to an apo B protein receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
       Narvanen O,
                                                  18-JUL-2000; 2000GB-00017641.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                         (ARKT-) ARK THERAPEUTICS LTD
                                                                            18-JUL-2001; 2001WO-GB003212.
                                                                                                                                                                        Oxidised low density lipoprotein; oxLDL; immunoassay; periaortitis; cardiovascular disease; coronary heart disease; pre-eclampsia; non-insulin-dependent diabetes; endothelial dysfunction; human; apoB-100;
                                                                                                             24-JAN-2002.
                                                                                                                                    WO200206314-A2
                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                            Human apoB-100 derived peptide p62.
                                                                                                                                                                                                                                                                                 17-MAY-2002
                                                                                                                                                                                                                                                                                                                        AAE14541 standard; peptide; 34 AA.
                                                                                                                                                                                                                                                                                                                                                                                                              1 TTRLTRKRGLK 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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Yla-Herttuala S;
                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 54; DB 2; Length 22; 100.0%; Pred. No. 0.0044; tive 0; Mismatches 0; Indels
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The invention relates to peptides having affinity for oxidised low CC is useful in an immunoassay to determine the presence, and optionally, CC the amount of antibodies in a sample, having affinity for oxidised low CC preferably immobilised peptide is useful for measuring the amount of CC autoantibodies for oxLDL in a sample, especially a serum or plasma sample CC crom a patient for evaluating the risk of coronary heart diseases, and several other disorders such as CC endothelial dysfunction. The peptide of the invention is stable, can be blood, and has a long half-life. The present sequence is human apoB-100 xxx
Sequence 34 AA;
                                                                                                                                                                                                                                                                             Claim 6; Page 5; 21pp; English.
                                                                                                                                                                                                                                                                                                         New peptide useful in enzyme immunoassays for detecting oxidized low density lipoprotein which is a marker of coronary heart disease and other cardiovascular diseases, has affinity for oxidized low density
                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-179777/23.
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Claim 13; Fig 7; 73pp; English.

Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells that express this receptor.

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Query Match
Best Local S
Matches 11
   24
        1 TTRLTRKRGLK 11
                                         l Similarity
TTRLTRKRGLK 34
                                    Conservative
                          100.0%; Score 54; DB 5; Length 34; 100.0%; Pred. No. 0.0068; tive 0; Mismatches 0; Indels
                           <u>,</u>
                        Gaps
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RESULT 8
                                                                                                                                                                   Human apolipoprotein B-100, apoB-100; very-low density lipoprotein; VI apolipoprotein; binding; in vivo transport; nucleic acid; binding dome nuclear localisation sequence; gene therapy; cancer; cystic fibrosis; non-small cell lung carcinoma; diabetes; arteriosclerosis.
                                                                                                                                                                                                                Nucleic acid binding
                                                                                                                                                                                                                                  22-APR-1999
                                                                                                                                                                                                                                                  AAW96876;
                                                                                                                                                                                                                                                          AAW96876 standard; peptide; 36
                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                       domain from apoB-100, residues 3348-3390.
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0

W09856938-A1 Homo sapiens.

10-JUN-1998; 17-DEC-1998 98WO-US011927

13-JUN-1997; 14-MAY-1998; (BAYU) BAYLOR COLLEGE MEDICINE. 97US-00874807. 98US-00079030.

Guevara JG, Hoogeveen RC, Moore JP;

WPI; 1999-070331/06.

Claim 16; Fig 12C; 293pp; English. Composition comprising nucleic acid bound to LDL or VLDL lipoprotein used for delivering nucleic acid to cells for gene therapy and antise and antisense

AAW96827-77 represent nucleic acid binding domains derived from human

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ARESULT 9
AAW64587
ID AAW6
XX AAW6
XX AAW6
XX AAW6
XX Pact
KW Fat
KW Fat
KW Hat
KW Hat
KW Hat
XX Homo
XX PP 12-J
XX I13-J
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XX WPI;
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Best Local
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AAW64587 and AAW64588 are fragments of human apolipoprotein which are used with Factor V protein fragments in a novel method to detect the presence of a mutated protein in a sample that may also contain the corresponding wild-type protein. The method is used to detect mutations that alter protein functions (either point mutation or small insertions or deletions), particularly in proteins involved in blood coagulation or metabolism of fat. Protein functions which are specially detectable are the Leyden mutation in factor V (associated with increased risk of deep vein thrombosis), mutations in apolipoprotein (apo) genes (certain alleles of apoE indicates increased risk of developing Alzheimer's disease), thermostable 5.10-methylenetestrahydrofolate reductase (associated with hypercysteinaemia and venous thrombosis) and factor VII mutations (associated with increased risk of cardiovascular disease). The
                                                                                                                                                                                                                                                                                                                                                         Detecting or quantifying mu comprises reaction with lig factors or apolipoproteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         apolipoprotein B-100 (apoB-100). ApoB-100 is a major apoprotein component of very-low density lipoproteins (VLDL), intermediate density lipoprotein (IDL), low density lipoproteins (LDL) and lipoprotein a. The present sequence can be used in the composition of the invention. The specification describes a composition that comprises LDL and apolipoproteins for the binding and in vivo transport of nucleic acids. The composition is used to deliver nucleic acids to eukaryotic cells, in vivo or in vitro, for expressing a therapeutic polypeptide or antisense molecule (or ribozyme). Specifically they are used for gene therapy of cancers (particularly non-small cell lung carcinoma), diabetes, cystic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Factor V; human; detection; protein function; blood coagulation; apo; fat metabolism; Leyden mutation; deep vein thrombosis; apolipoprotein; Alzheimer's disease; 5,10-methylenetetrahydrofolate reductase; prion; hypercysteinaemia; factor VII; cardiovascular disease; pathogen; virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 apolipoprotein of verv-1
                                                                                                                                                                                                                                                                                                                           Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Moritz B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-JAN-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ONDWMI (OWMI)
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                                                                                                                                                                                                                                                                                                                      2; Page 9; 18pp; German
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                                                                                                                                                                                                                                                                                                                                                                or quantifying mutant protein in presence of wild-type protein reaction with ligand - used to detect mutant blood coagulation apolipoproteins for diagnosing risk of thrombosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kiessig S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
illarity 100.0%;
Conservative (
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Pred. No.
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0.0072;
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       nd factor VII
disease). The
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RESULT 10
AAW96845
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Best Local Similarity
                       AAW96827-77 represent nucleic acid binding domains derived from human apolipoprotein B-100 (apoB-100). ApoB-100 is a major apoprotein component of very-low density lipoproteins (VLDL), intermediate density lipoprotein (IDL), low density lipoproteins ((LDL) and lipoprotein a. The present sequence can be used in the composition of the invention. The specification describes a composition that comprises LDL and apolipoproteins for the binding and in vivo transport of nucleic acids. The composition is used to deliver nucleic acids to eukaryotic cells, in vivo or in vitro, for expressing a therapeutic polypeptide or antisense molecule (or ribozyme). Specifically they are used for gene therapy of cancers (particularly non-small cell lung carcinoma), diabetes, cystic fibrosis and arteriosclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     method can also be applied to proteins from pathogens, e.g. viruses or prions. The method does not require complex apparatus for polymerase chain reactions, it is simple, standardisable and reliable and is particularly suited to routine screening. It also allows mutant protein in a sample to be quantified
                                                                                                                                                                                                                                                                       Composition comprising nucleic acid bound used for delivering nucleic acid to cells
                                                                                                                                                                                                                                                                                                                                                    Guevara JG,
                                                                                                                                                                                                                                                                                                                                                                                                                 13-JUN-1997;
14-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human apolipoprotein B-100; apoB-100; very-low density lipoprotein; VLDL; apolipoprotein; binding; in vivo transport; nucleic acid; binding domain; nuclear localisation sequence; gene therapy; cancer; cystic fibrosis; non-small cell lung carcinoma; diabetes; arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acid binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-APR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 37 AA;
                                                                                                                                                                                                                                                                                                                                                                                  (BAYU ) BAYLOR COLLEGE MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-JUN-1998;
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                                                                                                                                                                                                                            16; Page 151; 293pp;
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                                                                                                                                                                                                                                                                                                                                                    Hoogeveen
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98US-00079030.
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                                                                                                                                                                                                                                                                                                                                                    RC,
                                                                                                                                                                                                                            English.
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Pred. No. 0.0073;
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Query Match 100.0%; Best Local Similarity 100.0%; Matches 11; Conservative 0

0

Score 54; DB 2; Pred. No. 0.01; 0; Mismatches

้ง <u>,,</u>

Indels

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Gaps

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Sequence

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RESULT 12
ABG52504
ID ABG52
XX
AC ABG52
XX
DT 25-FE
XX
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ABB37687
XX ABB377687
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XX Pepti
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XX Human
XX Homo
XX Homo
PN WO200
XX J0-AU
PF J0-AU
XX J0-AU
PF 20-AU
XX J0-AU
PF 21-SE
PR 27-SE
PR 27-SE
PR 27-SE
PR 27-SE
PR 27-SE
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PR 20-AU
XX WPI;
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                    25-FEB-2003
                                                                    ABG52504;
                                                                                              ABG52504 standard; peptide; 343 AA
                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and present sequence is a peptide encoded by a single exon nucleic acid probe of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-FEB-2000; 2000US-0180312P.
26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 343 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 27; SEQ ID NO 30322; 639pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-483447/52.
                                                                                                                                                                                                                                                                                                                                                Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; foetal liver; gene expression; single exon nucleic acid probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptide #5193 encoded by human foetal liver single exon probe.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       n genome-derived single exon nucleic acid probes useful for analyzing expression in human fetal liver.
                                                                                                                                                                                                                                                                                                                       11,
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                                                                                                                                                                                                                                                                    TTRLTRKRGLK 11
                                                                                                                                                                                                                        TTRLTRKKĠĹK 178
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            (first entry)
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Pred. No. 0.065;
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RESULT 13
AAR72704
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AC AAR72
XX 31-OC
XX 31-OC
XX Human
XX Apo B
XW 11pid
XX
XX Homo
OS Homo
                                                                                                                                                                                                                                                                                                                                                                CC measuring human gene expression in a sample derived from human adult comprising one of 13109 defined nucleotide sequences given in the stringency to a nucleic acid molecule expressed in the human adult liver. (C stringency to a nucleic acid molecule expressed in the human adult liver. (C in samples derived from human adult liver. The genes identified may be used for predicting, measuring and displaying gene expression c in samples derived from human adult liver. The genes identified may be hyperlipoproteinaemia, hyperlipidaemia such as cirrhossis, c samples derived in yearlipidaemia and hypercholesterolaemia which is c associated with coronary heart disease. ABG47348-ABG5930 represent human c information for this patent does not appear in the printed specification to fix this patent does not appear in the printed specification c ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                      Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                  Query Match
           Homo sapiens.
                                     Apo B-100; hybridoma MB47; LDL cholesterol; low density lipoprotein; lipid.
                                                                          Human apo B-100 polypeptide
                                                                                                              31-OCT-1995
                                                                                                                                           AAR72704;
                                                                                                                                                              AAR72704 standard; protein; 377
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26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-0068408.
03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                             Sequence 343 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a single exon nucleic acid probe (SENP) (I) measuring human gene expression in a sample derived from human adult
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 27; SEQ ID NO 31152; 658pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human adult liver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-488898/53.
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                                                                                                                                                                                                                                                                                                                     Local
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hypercholesterolaemia; coronary heart disease.
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                                                                                                                                                                                                                                                                                              ilarity 100.0%; Conservative 0;
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Pred. No. 0.065;
Mismatches 0;
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                                                                                               CC AAQ89633 and AAR72704 depict the AA sequence of human apo B-100 and its CC corresp. cDNA, from AA residue 3214 through residue 3590 according to the CC numbering scheme of Ludwig et al., DNA, 6:363 (1987). Ludwig et al.
CC reported the full cDNA sequence for the human apo B-100 gene, consisting of 29 exons. AAQ89633 corresp. to nts 9642-10770. The apo B-100 cDNA cc segment in AAQ89633 encodes an apo B-100 polypeptide called 89. Other CC truncated AA sequences and cDNA sequences of apo B-100 identified in the CC disclosure are: No. N terminus C terminus AA nt AA nt 81 3429 10287 3510 (10530 82 3418 10254 3510 10530 83 3386 10158 3510 10530 84 3353 10059 CC 10530 82 3418 10287 3523 10569 86 3429 10287 3544 10632 87 3429 CC 10287 3565 10695 88 3429 10287 3590 10770 89 3214 9642 3590 10770 Forward CC (F) and reverse (R) primers that can be used to generate a cDNA segment CC coding for the above fragments are given in AAQ86935- AAQ86944. A CC polypeptide is claimed which includes residues 217-297 and which CC immunoreacts with antibodies generated by the hybridoma MB47 having ATCC CACcession No. HB 8746. Claimed polypeptides are listed in RT. A fusion CC CAAQ89634/R72705) and a sequence of apo B-100
                                                           Query Match
Best Local
                                                Matches
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Peptide
                                                                                               Sequence 377
                                                                                                                                                                                                                                                                                                                                                                  Claim 6; Fig 1; 41pp; English
                                                                                                                                                                                                                                                                                                                                                                                       Polypeptide mimic of native apo B-100 and native apo A-I - useful in assays for LDL and HDL in plasma samples.
                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1993-134378/16.
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18-JUN-1992;
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                                                           Similarity
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TTRLTRKRGLK 154
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92US-00901706.
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                                              0
                                             Score 54; DB 2;
Pred. No. 0.071;
Mismatches 0
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RESULT 15
ADJ57400
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18-JUN-1992;
08-OCT-1992;
                                                                                                                                                                                                                                                                                               The inventors claim a portion of the polypeptide contg. apo B-100 that immunoreacts with antibodies secreted by the hybridoma MB47 having ATCC Accession No. 8746. Polypeptides specifically claimed include residues 217-297, 216-310, 216-331, 216-352, 216-377, 1-377, 205-297, 173-297, 140-297. DNA sequences encoding the polypeptides are also claimed. Also claimed are a fusion polypolypeptide that contains: (a) a first maino acid residue sequence up to 250 residues in length that includes residues 120-135 of apo A-I, (b) a second amino acid residue sequence up to 375 residues in length that includes residues 217-297 of apo B-100 and DNA encoding it. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                          Sequence 377 AA;
                                                            06-MAY-2004
                                                                                     ADJ57400
                                                                                                           ADJ57400 standard; protein; 2463 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 6; Page 103-104; 137pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Polypeptide mimic of native apo B-100 and assays for LDL and HDL in plasma samples.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Smith RS,
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13-AUG-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1993-134378/16.
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(first entry)
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92US-00901706.
92US-00959946.
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Pred. No. 0.071;
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Hepatocellular carcinoma; marker; human; apolipoprotein B; diagnosis

Human apolipoprotein B, marker for hepatocellular carcinoma.

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CC The present sequence is that of human apolipoprotein B. This non-cell CC associated protein is one of a set of proteins characterised as associated protein is one of a set of proteins characterised as CC diagnostic targets for hepatocellular carcinoma (HCC). Such proteins are CC the products of genes identified by expression microarray analysis of CC tumour samples from hepatitis C virus (HCV) infected patients with HCC as CC infected cirrhotic non-tumour tissue and normal liver. The invention CC relates to the detection of HCC by assaying patient samples such as CC tissue, plasma, serum, etc. for the presence and level of specific HCC CC proteins. A finding of elevated levels of one or more of these CC proteins in a patient sample indicates that the patient has HCC. Methods CC and scanning methods that employ non-cell-associated and cell-associated xxx
                                                                          Query Match
Best Local S
Matches 11
                                                                                                                                       Sequence 2463 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 4; 48pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Detecting hepatocellular carcinoma (HCC) in mammals comprises obtaining and assaying a biological sample to quantify a cell-associated or a noncell-associated HCC-related protein and comparing the quantity to a control level.
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GENBANK; NP_000375.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-JUL-2002; 2002US-0393982P
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1284 TTRLTRKKGLK 1294
                                                                  ch 100.0%; Score 54; DB 8; Length 2463;
il Similarity 100.0%; Pred. No. 0.45;
11; Conservative 0; Mismatches 0; Indels (
                        1 TTRLTRKRGLK 11
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                                                                Mismatches
                                                               0;
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Search completed: January 12, 2005, 13:25:40 Job time : 102.484 secs

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Result
No.
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Listing first 45 summaries
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              of hits satisfying chosen parameters:
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2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/FCTUS_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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US-09-079-030-98
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US-09-079-030-205
US-09-079-030-225
US-09-079-030-225
US-09-079-030-221
US-09-079-030-214
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Sequence 2, Appli
Sequence 4, Appli
Sequence 5, Appli
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Sequence 166, Appli
Sequence 1, Appli
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Sequence 1, Appli
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Sequence 7, Appli
Sequence 1, Appli
Sequence 3, Appli
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44 81.5 78.5 4 US-09-079-030-216 43 79.6 10 4 US-09-265-222-2 43 79.6 10 4 US-09-265-222-3 43 79.6 10 4 US-09-265-222-4 42 77.8 10 4 US-09-265-222-8 42 77.8 10 4 US-09-265-222-1 42 77.8 10 4 US-09-265-222-1 43 79.6 10 4 US-09-265-222-1 44 77.8 10 4 US-09-265-222-1 53 11 4 US-09-265-222-1 53 8.5 71.3 11 4 US-09-265-222-1 54 8 390 4 US-09-363-221-693 55 64.8 390 4 US-09-108-020-36 56 64.8 390 4 US-09-108-020-36 56 64.8 390 4 US-09-901-151-6	4. 5	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	6
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	6, Appli	5, Appli	36, Appl	693, App	4590, Ap			17, App]	16, Appl	13630, /	12, Appl	10, App]	8, Appli	4, Appli	3, Appli	Appli	216, App	00, 000

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FILE REPERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
SOPTWARE: PatentIn version 3.0
SEQ ID NO 2
LENGTH: 11
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GENERAL INFORMATION:
APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Bailite, George
APPLICANT: Bailite, George
TITLE OF INVENTION: No. 6670452-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
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Patent No. 6670452

GENERRAL INFORMATION:
APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Owens, Moira
APPLICANT: Baille, George
TITLE OF INVENTION: No. 6670452-Naturally Occurring Lipoprotein Particle
                                                                                                                                                                              Sequence 4, Application US/09269533A Patent No. 6670452
                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TENGTH: 11
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
FEATURE:
NAME/KEY: misc feature
LOCATION: ()...()
OTHER INFORMATION: Apo B binding site sequence
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US-09-079-030-205
    Query Match
Best Local Similarity
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFWMARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA;
APPLICATION NUMBER: US/09/079,030
FILING DATE: Concurrently Herewith
ATTORNEY/AGENT TOTAL
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OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site NAME/KEY: misc feature

LOCATION: ()...()

OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
US-09-269-533A-4
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                                                                                                                                       NFORMATION FOR SEQ ID NO:
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LENGTH: 13
TYPE: PRT
                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: McMillian, Nabeela R.
REGISTRATION NUMBER: p-43,363
REFERENCE/DOCKET NUMBER: ARAG.
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.0
                                                                  STRANDEDNESS:
TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, W
                                                                                               TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
                                                                                                                                                  TELEPHONE: 512/418-30
TELEFAX: 512/474-7577
                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: US
ZIP: 77210
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Score 54; DB 4;
Pred. No. 0.00065;
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Pred. No. 0.00056;
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         Length 15;
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APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Owens, Moira
APPLICANT: Baillie, George
TITLE OF INVENTION: No. 6670452-Naturally Occurring Lipoprotein Particle
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT APPLICATION NUMBER: PCT/GB97/02610
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILLING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR APPLICATION NUMBER: GB 9620153.8
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.0
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                                                                                                                                                                                                                                                                                                                                            US-09-269-533A-6
           SEQ ID NO 6
LENGTH: 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.
11; Conservative
                                                                                                                                                                                                                                                                                                            Sequence 6, Application US/09269533A
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TYPE: PRT
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SEQ ID NO 5
LENGTH: 22
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Owens, Moira
APPLICANT: Baille, George
TITLE OF INVENTION: No. 6670452-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR PILING DATE: 1996-09-27
NUMBER: OF SEQ ID NOS: 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc_feature
LOCATION: ()..()
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Cholesterol linked at C-terminus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                           INFORMATION:
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Pred. No.
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RESULT 7
US-09-079-030-98
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COTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding

NAME/KEY: misc_feature

LOCATION: ()...()

OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue

US-09-269-533A-6
                                                                                                                                                                                                                                 US-09-079-030-166
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                                                                                                                                                            Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/09/079,030
FILING DATE: Concurrently Herewith
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: McMillian, Nabeela R.
REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARG:003
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent No.
                                                                                                                                                                                                                                                                                                               TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial Sequence FEATURE: NAME/KEY: misc feature LOCATION: ()...()
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Guevera, Jr., Jud
APPLICANT: Hoogeveen, Ron C.
APPLICANT: Moore, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: Texas
COUNTRY: USA
ZIP: 77210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY ITLE OF INVENTION: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS IMBER OF SEQUENCES: 229
                                                                                                                                                                                                                                               STRANDEDNESS:
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                TYPE: amino acid
                                                                                                                                                                            local Similarity
                                                                                                                                                                                                                                                                                                LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Arnold, White & Durkee
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                                                                                                                                                          11; Conservative
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                                                                                                                         1 TTRLTRKRGLK 11
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                                                                                       TTRLTRKRGLK 20
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 Application US/09079030
                                                                                                                                                                                                                                                                                                  36 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E: Ploppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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100.0%; pr
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100.0%; Pred. No. 0.00095;
tive 0; Mismatches 0;
                                                                                                                                                                          Score 54; DB 4;
Pred. No. 0.0016;
                                                                                                                                                            Mismatches
                                                                                                                                                                                         Length 36;
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                                                                                                                                                                                                                                              GENERAL INFORMATION:

APPLICANT: Smith, Richard K.

APPLICANT: Koduri, Raju

APPLICANT: Young, Stephen G.

APPLICANT: Witztum, Joseph L.

APPLICANT: Curtiss, Linda K.

TITLE OF INVENTION: Lipoprotei

TITLE OF INVENTION: Pan Native

NUMBER OF SEQUENCES: 20
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Matches
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/09/079,030
FILING DATE: Concurrently Herewith
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
AREGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARAG:003
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3000
TELEPHONE: 512/418-3000
TELEPHONE: 512/474-7577
                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1, Application US/07959946 Patent No. 5408038
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APPLICANT: Guevera, Jr., Juan G.
APPLICANT: Hoogeveen, Ron C.
APPLICANT: Moore, Paul J.
TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO:
                                ZIP: 60601
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 51 amino acids
                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: US
ZIP: 77210
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                          CITY: Chicago
STATE: Illinois
                                                                                                                                                                                    ADDRESSEE: Dressler, Goldsmith, Shore, Sutker ADDRESSEE: Milnamow, Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
STRANDEDNESS:
                                                                                                       COUNTRY:
                                                                                                                                                                 STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Houston
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                                                                                                                                                               180 No. 5408038th Stetson, Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P.O. Box 4433
                                                                                                         USA
                                                                                                                                                                                                                                                  Witztum, Joseph L.
Curtiss, Linda K.
VENTION: Lipoprotein Assays Using Antibodies to
VENTION: Pan Native Epitope and Recombinant Anti
EQUENCES: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 54; DB 4; ]
[larity 100.0%; Pred. No. 0.0022;
Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                    Antigens
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FILING DATE:
FILING BATE:
FILING BATE:
FILING BATE:
FILING BATE:
FILING BATE:
FILING BATE:
ATTORNEY/AGENT INFORMATION:
NAME: Gamson, Edward P.
REGISTRATION NUMBER: 29,381
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312)616-5460
TELEFAN: (312)616-5460
TELEFAN: SEO ID NO: 1:
TELEFAX: (3)2)616-546
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 377 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-333-577-1
                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; MOLECULE TYPE: protein US-07-959-946-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1, Application US/08333577 Patent No. 5786206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 100.0%; Score 54; DB 1; Length 377;
Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 19921008

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/901,706

FILING DATE: 18-JUN-1992

NAME: Gameson, Edward P.
REGISTRATION NUMBER: 29,381

TELECOMMUNICATION INFORMATION:
TELEPAN: (312)616-5400

INFORMATION FOR SEQ ID NO. 1:
LENGTH: 377 amino acids
TYPE: AMINO ACID

NODECCEY: UNICE TYPE: AMINO ACID

TOPOLOGY: 1inear
                                                                                                                                                                                                                                                                                                                   STREET:
STREET:
CITY: Chicago
TATE: Illinois
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GENERAL IN
                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Smith, Richard K.
APPLICANT: Koduri, Raju
APPLICANT: Young, Stephen G.
APPLICANT: Witzum, Joseph L.
TITLE OF INVENTION: Lipoprotein Assays Using Antibodies to a
NUMBER OF SEQUENCES: 20
                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0, Version #1.25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 TTRLTRKRGLK 11
                                                                                                                                                                                                                                                                                                                                                180 No. 5786206th Stetson, Suite 4700
                                                                                                                                                                                                                                                                                                                                                                          Dressler, Goldsmith, Shore, Sutker & Milnamow, Ltd.
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RESULT 11
US-09-079-030-223
; Sequence 223, Application US/09079030
; Patent No. 6635623
                                                                                                                                                                                                                   PCT-US92-08634-1
                                                                                                                                Query Match
100.0%; Score 54; DB 5; Length 377;
Best Local Similarity 100.0%; Pred. No. 0.017;
Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                            TELEPHONE: (312)616-54
TELEFAX: (312)616-54
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: PCT/USS
FILING DATE: 19921009
CLASSIFICATION: 19921009
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/:
PILING DATE: 18-JUN-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 10
PCT-US92-08634-1
                                                                                                                                                                                                                     LENGTH: 377 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: (312)616-5400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
; MOLECULE TYPE: protein
US-08-333-577-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
OPERATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application GENERAL INFORMATION:
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Best Local S
                                                                                                                                                                                                                                                                                                                                               NAME: Gamson, Edward P.
REGISTRATION NUMBER: 29
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                             144 TTRLTRKRGLK 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 180 North
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Koduri, Raju
APPLICANT: Young, Stephen G.
                                                                                                                      1 TTRLTRKRGLK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Dressler, Goldsmith, Shore, Sutker & Milnamow, Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60601
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                                                                                                                                                                                                                                                                                       3: (312)616-5460
TD NO: 1:
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Witztum, Joseph L.
Curtiss, Linda K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180 North Stetson, Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Smith, Richard K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lipoprotein Agsays Using Antibodies to a Pan Native Epitope and Recombinant Antigens
                                                                                                                                                                                                                                                                                                                                                                                                              US_07/901,706
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GENERAL INFORMATION: APPLICANT: Guever

Guevera, Jr., Juan G.

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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/99/079.030
FILING DATE: Concurrently Herewith
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: MCMillian, Nabeela R.
REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARAG:003
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 214, Application US/09079030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                  Patent No. 6635623
GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 223:
SEQUENCE CHARACTERISTICS:
MEDIUM TVEE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/079,030
FILING DATE: Concurrently Herewith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Hoogeveen, Ron C.
APPLICANT: Moore, Paul J.
TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
NUMBER OF SEQUENCES: 229
CORRESPONDENCE ADDRESS:
ADDRESSEB: Arnold, White & Durkee
                                                                                                                     MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 2
                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                            APPLICANT: Guevera, Jr., Juan G. APPLICANT: Hoogeveen, Ron C. APPLICANT: Moore, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: US
ZIP: 77210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH:
                                                                                                                                                          COUNTRY: USA
ZIP: 77210
                                                                                                                                                                                                   STATE:
                                                                                                                                                                                                                                  STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
TOPOLOGY: 11
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                                                                                                                                                                                                                                                 Arnold,
                                                                                                                                                                                                                                                                                                        LIPOPROTEINS AS NUCLEIC ACID DELIVERY VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 54; DB 4; Length 420; 100.0%; Pred. No. 0.018;
                                                                                                                                                                                                                                                   White & Durkee
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US-09-180-422B-27
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                                                                                                                                                                                                                               NAME: SADOFF, B.J.

REGISTRATION NUMBER: 3663
REFERENCE/DOCKET NUMBER: 117
TELECOMMUNICATION INFORMATION:
TELEPHONE: 7038164000
TELEFAX: 7038164100
INFORMATION FOR SEQ ID NO: 27:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 27, Application US/09180422B
Patent No. 6444644
GENERAL INFORMATION:
GENERAL ESTELAIE, CAMILLE
ETTELAIE, CAMILLE
                                    Matches
                                                 Query Match
Best Local Similarity
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: McMillian, Nabeela R.
REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARAGITELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3000
                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/180,422B
FILING DATE: 07-Dec-1998
CLASSIFICATION: CUNKnown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 840 amino acids
                                                                                                                        TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 27:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: NIXON & VANDERHYE, P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED FROM APOLIPOPROTEIN B-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          657 TTRLTRKRGLK 667
                                    11,
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1 TTRLTRKRGLK 11
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                                                                                                                                                                               TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: VA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: ARLINGTON
                                                                                                                                                                                                                      ENGTH: 4536 amino acids
                                    Conservative
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                                                   100.0%; Score 54; D
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                                    0;
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                                    Mismatches
                                                                                                                                                                                                                                                                                                                                 117-268
                                                                    DB 4;
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                                                                    Length 4536;
                                    Indels
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                                    Gaps
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RESULT 14 US-09-079-030-1

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3357 TTRLTRKRGLK 3367

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RESULT 15
US-09-108-006C-1
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Patent No. 6524613
GENERAL INFORMATION:
APPLICANT: Steer, Clifford J.
Kren, Betsy T.
Bandyopadhyay, Paramita
Roy-Chowdhury, Jayanta
NUMBER OF INVENTION: Hepatocellular Chimeraplasty
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COMPUTER: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION IN Release #1.0, Version #1.30
APPLICATION NUMBER: US/09/079,030
PILING DATE: Concurrently Herewith
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
AMES: MCMIllian, Nabeela R.
REGISTRATION NUMBER: P43,363
REFERENCE/DOCKET NUMBER: ARAG:003
TELEPHONE: 512/418-3000
TELEPHONE: 512/418-3000
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Best Local :
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TELEPAX: 512/474-7577
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:

APPLICANT: Guevera, Jr., Juan G.

APPLICANT: Hoogeveen, Ron C.

APPLICANT: Hoogeveen, Ron C.

TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY NUMBER OF SEQUENCES: 229

CORRESPONDENCE ADDRESS:

ADDRESS:

ADDRESS:

ATREET: P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 54; DB 4; Length 4536; Local Similarity 100.0%; Pred. No. 0.2; Pred
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TYPE: a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear
                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
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3357 TTRLTRKRGLK 3367
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COUNTRY: USA
ZIP: 77210
ADDRESSEE: Kimeragen, Inc.
STREET: 300 Pheasant Run
CITY: Newtown
STATE: pA
COUNTRY: USA
ZIP: 18940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             amino acid
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6635623
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Search completed: January 12, 2005, 13:33:16 Job time: 26.9032 secs

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US-09-108-006C-1
                                                                       Query Match
Query Match
100.0%; Score 54; DB 4; Length 4563;
Best Local Similarity 100.0%; Pred. No. 0.2;
Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 4563 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 30-APR-1997
APPLICATION NUMBER: 60/054,288
FILING DATE: 30-APR-1997
APPLICATION NUMBER: 60/054,837
FILING DATE: 05-AUG-1997
APPLICATION NUMBER: 60/064,996
FILING DATE: 10-NOV-1997
APPLICATION NUMBER: 60/074,497
APPLICATION NUMBER: 60/074,497
APPLICATION NUMBER: 60/074,497
APPLICATION NUMBER: PCT US 98/08834
FILING DATE: 12-FEB-1998
APPLICATION NUMBER: PCT US 98/08834
FILING DATE: 11-APR-1998
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 29258
REGISTRATION NUMBER: 7991-015-999
TELEPHONE: 71-504-4447
TELEPHONE: 71-504-4447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM.

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION NUMBER: US/09/108,006C
FILING DATE: 30-Jun-1992
CLASSIFICATION: CUNKNOWN>
APPLICATION DATE:
APPLICATION DATE:
3384 TTRLTRKRGLK 3394
                                             TTRLTRKRGLK 11
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                                                                       Gaps
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Result
No.
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Maximum
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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seq length: 2000000000
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1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US06_NEW PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

7: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

9: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

11: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

12: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

13: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

14: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

15: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

16: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

17: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

18: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*
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  US-09-269-533A-2

US-09-269-533A-4

US-09-269-533A-4

US-09-269-533A-5

US-09-269-533A-5

US-09-269-533A-6

US-10-657-404A-5

17 US-10-657-404A-6

17 US-10-657-404A-9

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US-09-84-761-46837

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US-09-870-759-128
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Sequence 4, Appli
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Sequence 6, Appli
Sequence 6, Appli
Sequence 6, Appli
Sequence 6, Appli
Sequence 9, Appli
Sequence 1, Appli
Sequence 4837, Ap
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Sequence 4, Appli	equence 3,	'n	e 3,	2, App]	e 76	22	Sequence 3, Appli	ļ,	,	7,		11,	٥	7,	5,	θ, Ar	e 729,		e 595,	Sequence 6, Appli	ŗ	ς,	Sequence 1, Appli	20	20, Ag	e 12	e 433,	e 432,	32, App	128,	Sequence 32, Appl

밁 გ US-09-269-533A-2 US-09-269-533A-2 Sequence 2, Application US/09269533A Patent No. US20020147304A1 GENERAL INFORMATION: PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.0
SEQ ID NO 2 Matches Query Match Best Local Similarity FILE REFERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1097-09-25 APPLICANT: Baillie, George TITLE OF INVENTION: No. US20020147304A1-Naturally Occurring Lipoprotein Particle APPLICANT: University of Strathclyde APPLICANT: Halbert, Gavin APPLICANT: Owens, Moira APPLICANT: Baillie, George NAME/KEY: misc_feature LOCATION: ()...()
OTHER INFORMATION: Apo B binding site sequence LENGTH: 11
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE: 11; Conservative TTRLTRKRGLK 11 100.0%; Score 54; DB 9; 100.0%; Pred. No. 0.0032; <u>.</u> Mismatches Length 11; 0; Gaps 0,

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PILE REFERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
PRIOR APPLICATION NUMBER: 1999-06-01
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR APPLICATION NUMBER: GB 9620153.8
NUMBER OF SEQ ID NOS: 7.
           Query Match
Best Local Similarity
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PRIOR APPLICATION NUMBER: 2003-09-08
PRIOR APPLICATION NUMBER: PRIOR PILING DATE: 1997-09-25
PRIOR PILING DATE: 1997-09-27
PRIOR PILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 9
SEQ ID NO 2
SEQ ID NO 2
SEQ ID NO 2
SEQ ID NO 2
                                                                                                                                                                                                                                                              SEQ ID NO 4
                            LOCATION: ()...()
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
NAME/KEY: misc_feature
LOCATION: ()...()
OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4, Application US/09269533A Patent No. US20020147304A1 GENERAL INFORMATION:
                                                                                                                                                               NAME/KEY: misc_feature
                                                                                                                                                                                    TYPE: PRT
ORGANISM: Artificial Sequence
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APPLICANT: Owens, Moira
APPLICANT: Baille, George
ITILE OF INVENTION: NO. US20020147304A1-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
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APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
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Publication No. US20040235730A1
GENERAL INFORMATION:
APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
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TYPE: PRT
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TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US-CIP
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Owens, Moira
       100.0%;
Score 54; DB 9;
Pred. No. 0.0038;
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Pred. No. 0.0032;
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       Length 13;
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FILE REFERENCE: POT885US
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT APPLICATION NUMBER: US/09/269,533A
FRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR PELICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SED ID NOS;
SOFTWARE: PatentIN version 3.0
TENNOTH: 22
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Patent No.
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                                LENGTH: 22
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                        APPLICANT: Baillie, George
TITLE OF INVENTION: No. US20020147304A1-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
NAME/KEY: misc feature LOCATION: ()...()
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APPLICANT: Owens, Moira
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Best Local Similarity
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OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
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TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
FILE REFERNCE: P07885US-CIP
CURRENT APPLICATION NUMBER: US/10/657,404A
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR FILING DATE: 1997-09-25
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APPLICANT: Halbert, Gavin
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Owens, Moira
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                                                                                                                                                                       Sequence 5, Application US/10657404A Publication No. US20040235730A1 GENERAL INFORMATION:
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APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
                                                                                                                                                                                                                                                                                                                                                                                           Matches
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Best Local Similarity
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APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Owens, Moira
APPLICANT: Bailie, George
TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US-CIP
CURRENT APPLICATION NUMBER: US/10/657,404A
CURRENT FILING DATE: 2003-09-08
PRIOR APPLICATION NUMBER: PCT/GB97/02610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER: OF SEQ ID NOS: 7
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Patent No. US20020147304A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Baillie, George
TITLE OF INVENTION: No. US20020147304Al-Naturally Occurring Lipoprotein Particle
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence FEATURE:
NAME/KEY: misc feature
LOCATION: ()...()
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding NAME/KEY: misc feature
LOCATION: ()...()
OCHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
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TYPE: PRT
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LOCATION: ()...
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Owens, Moira
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Pred. No. 0.0065;
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Pred. No.
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 RESULT 9
US-10-657-404A-9
US-10-657-404A-9
; Sequence 9, Application US/10657404A
; Publication No. US20040235730A1
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US-10-657-404A-6
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SEQ ID NO 6
LENGTH: 22
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Best Local Similarity 100.0%;
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SEQ ID NO 5
LENGTH: 22
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PRIOR APPLICATION NUMBER: GB:
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 9
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Owens, Moira
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PILE REFERENCE: P07885US-CIP
CURRENT APPLICATION NUMBER: US/10/657,404A
CURRENT FILING DATE: 2003-09-08
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Baillie, George
TITLE OF INVENTION: Non-Naturally Occurring
                                                                                                    FEATURE: misc feature OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 FEATURE: NAME/KEY: misc feature OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KBY: misc feature OTHER INFORMATTON: Retinoic acid linked at N-terminus of peptide analogue
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NAME/KEY: misc feature
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
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OTHER INFORMATION: Cholesterol linked at C-terminus
100.0%; Score 54; DB 17; larity 100.0%; Pred. No. 0.0065; Conservative 0; Mismatches 0
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Pred. No. 0.0065;
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                                          DB 17;
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                                        Length 22;
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GENERAL INFORMATION:

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RESULT 11
US-09-864-761-46837
; Sequence 46837, Application US/09864761
                                                                                                                                            Query Match
Best Local Similarity
Thes 11; Conserve
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APPLICANT: Yla-Herttuala, Seppo
TITLE OF INVENTION: Peptides and Their Use in Assays for Cardiovascular Disease
FILE REFERENCE: GJE-6363
CURRENT PLICATION NUMBER: US/10/333,313
CURRENT FILING DATE: 2003-01-15
PRIOR APPLICATION NUMBER: PCT/GB01/03212
PRIOR FILING DATE: 2001-07-18
SOFTWARE: PatentIn version 3.1
TENOTURE: PatentIn version 3.1
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; OTHER INFORMATION: Pyrene butyric acid linked at N-terminus of peptide analogue
US-10-657-404A-9
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Publication No. US20040091934A1
GENERAL INFORMATION:
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Best Local s
                                                                                                                                                                                                                                                                       TYPE: PRT ORGANISM: Artificial Sequence
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TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US-CIP
CURRENT APPLICATION NUMBER: US/10/657,404A
CURRENT FILING DATE: 2003-09-08
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 99-27
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NAME/KEY: MISC FEATURE
OTHER INFORMATION: Cholesterol linked at C-terminus of peptide analogue
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APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
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TYPE PRT
ORGANISM: Artificial Sequence
FEATURE:
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nilarity 100.0%;
Conservative (
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100.0%; P
ative 0;
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Pred. No. 0.01;
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Pred. No. 0
                                                                                                                                                         Mismatches
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0.0073;
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RESULT 12 US-10-741-601-431

Sequence

431,

Application US/10741601

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FILE REPERENCE: ACOMICA-X-1
CURRENT APPLICATION UNMERR: US/09/864,761
PRIOR APPLICATION UNMERR: US/09/864,761
PRIOR APPLICATION NUMBER: US/09/864,761
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-04
PRIOR PILING DATE: 2000-05-26
PRIOR PILING DATE: 2000-05-26
PRIOR PILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 99/632,366
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR PILING DATE: 2000-10-04
PRIOR PILING DATE: 2000-10-10-0666
PRIOR PILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR PILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR PILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00669
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Matches
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PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annomax Sequence Listing Engine vers.
SEQ ID NO 46837
LENGTH: 343
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PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00663
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00662
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00670
PRIOR APPLICATION NUMBER: PCT/US01/00670
PRIOR APPLICATION NUMBER: PCT/US01/00670
                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR FILING DATE: 2000-09-21
                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
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      168
                                         1 TTRLTRKRGLK 11
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                                                                                                                                                 Similarity
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TTRLTRKRGLK 178
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                                                                                                                  Conservative
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100.0%; P
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Pred. No. 0.1;
0; Mismatches
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Sequence 32, Application US/09802640

Publication No. US20030036057A1

GENERAL INFORMATION:
APPLICANT: Braun, Andreas
APPLICANT: Bonaal Aruna
APPLICANT: Kleyn Patrick
TITLE OF INVENTION: GENES AND POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISEASE AND THEIR USE
FILE REFERENCE: 24736-2048

CURRENT APPLICATION NUMBER: US/09/802,640

CURRENT FILING DATE: 2001-03-09

NUMBER OF SEQ ID NOS: 122

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT OF NEOPLASTIC DISEASE
FILE REFERENCE: 870759
CURRENT APPLICATION NUMBER: US/09/870,759
CURRENT FILING DATE: 2002-01-14
PRIOR APPLICATION NUMBER: US 60/208,128
PRIOR FILING DATE: 2000-05-30
INUMBER OF SEQ ID NOS: 166
SOFTWARE: PATENTION OF SEQ ID NOS: 166
SOFTWARE: PATENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-802-640-32
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US-09-870-759-128
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; ORGANISM: Homo sapiens
US-10-741-601-431
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GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001500
CURRENT APPLICATION NUMBER: US/10/741,601
CURRENT FILING DATE: 2003-12-22
NUMBER OF SEQ ID NOS: 26415
SOFTWARE: F88tSEQ for Windows Version 4.0
SEQ ID NO 431
LENGTH: 3000
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Best Local Similarity 100.0%;
Matches 11; Conservative 0
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APPLICANT: TERMAN, David S
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Patent No. US20020177551A1
LENGTH: 4563
TYPE: PRT
ORGANISM: Homo sapien
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Pred. No. 0.88;
Mismatches
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CURRENT APPLICATION NUMBER: US/09/751,708A
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: US 60/173,371
PRIOR FILING DATE: 1999-12-28
NUMBER OF SEQ ID NOS: 166
SOFTWARE: PatentIn version 3.1
SEQ ID NO 128
LENGTH: 4563
TYPE: PRT
ORGANISM: Homo sapiens
US-09-751-708A-128
Search completed: January 12, 2005, 13:52:50 Job time: 89.3548 secs
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US-09-751-708A-128
Sequence 128, Application US/09751708A
Publication No. US20030157113A1
GENERAL INFORMATION:
APPLICANT: TERMAN, David S
TITLE OF INVENTION: COMPOSITIONS AND METHODS
FILE REFERENCE: 751708
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Pred. No. 1.3;
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A;Status: preliminary A;Molecule: type: mRNA A;Residues: 1-596 <PAP> A;Residues: 1-596 <PAP> A;Cross-references: UNIPROT:Q28473; EMBL:X15737; NID:g38047; PIDN:CAA33755.1; PID:g93012 C;Superfamily: apolipoprotein B 밁 ફ Query Match Best Local 9 Matches 225 1 TTRLTRKRGLK 11 Similarity Conservative 100.0%; Score 54; DB 2; Pred. No. 0.015; Mismatches 0 Length 596 Indels 0; Gaps 0

k; Fape, M.E.; Castle, C.K.; Murray, R.W.; Funk, G.M.; Hunt, C.E.; Marotti, K.R.; Melchic Blochim. Blophys. Acta 1086, 326-334, 1991
A;Title: Apo B metabolism in the cynomolgus monkey: evidence for post-transcriptional re A;Reference number: S32802; MUID:92075708; PMID:1742325

apolipoprotein B - crab-eating macaque (fragment)
C;Species: Macaca fascicularis (crab-eating macaque)
C;Datc: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004

ALIGNMENTS

S32802

C 363 373 1007	R;Ludwig, E.H.; Blackhart, B.D.; Pierotti, V.R.; Caiati, L.; Fortier, C.; Knott, T.; Sco	4452; I61909; I59510; I39474; I39469; I84624; I37179; PS0058	;Accession: A27850; A25679; A25263; A25267; A25266; A24320; A24684; A23817; A25774; A26	C; Date: 28-Dec-1987 #sequence_revision 28-Dec-1987 #text_change 09-Jul-2004	C; Species: Homo sapiens (man)	N; Contains: apolipoprotein B-26; apolipoprotein B-48; apolipoprotein B-74	polipoprotein B-100 precursor - human
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DNA 6,

363-372, 1987

RESULT LPHUB

A;Molecule type: DNA
A;Residues: 1-617,'A', 619-1929,'F',1931-3318,'D',3320-3426,'T',3428-3431,'Q',3433-3731,'
A;Residues: UNIPROT:P04114; UNIPROT:P78482; UNIPROT:P78479; UNIPROT:Q9UMNO; UNIP
R;Cladaras, C.; Hadzopoulou-Cladaras, M.; Nolte, R.T.; Atkinson, D.; Zannis, V.I.
EMBO J. 5, 3495-3507, 1986
A;Title: The complete sequence and structural analysis of human apolipoprotein B-100: re
A;Reference number: A91058; MUID:87161758; PMID:3030729
A;Accession: A25679 A;Title: DNA sequence of the human apolipoprotein B gene. A;Reference number: A27850; MUID:88003974; PMID:3652907 A;Accession: A27850

A;Molecule type: mRNA A;Residues: 1-11,1239,'S',2541-3823,'R',3825-4563 <CLA> A;Residues: 109-Asp was elso found R;Knott, T.J.; Wallis, S.C.; Powell, L.M.; Pease, R.J.; Lusis, A.J.; Blackhart, Nucleic Acids Res. 14, 7501-7503, 1986

B -McCa

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A;Accession: A26533
A;Molecule type: mRNA
A;Residues: 1282-2721,2742-3290,'L',3292-3336,'N',3338-3948,'F',3950-3963,'Y',3965-4180,'A;Cross-references: GBLM15421; NID:g178817; PIDM:AAA51758.1; PID:g178818
R;Hardman, D.A., Protter, A.A.; Chen, G.C.; Schilling, J.W.; Sato, K.Y.; Lau, K.; Yamana Biochemistry 26, 5478-5486, 1987
A;Title: Structural comparison of human apolipoproteins B-48 and B-100.
A;Reference number: A29671; MUID:88050832; PMID:3676265
A;Accession: A29671
A;Accession: A29671
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A;ROLECULE type: mRNA
A;ROSIGULE: 709-791, 'SSSWKAASHGCPHSAGD',810-906 <DEB>
A;CYCOSS-references: GB:K03175; NID:g178821; PIDN:AAA51759.1; PID
R;CArlBson, P; Darnfors, C.; Olofsson, S.O.; Bjursell, G.
Gene 49, 29-51, 1986
A;Title: Analysis of the human apolipoprotein B gene; complete;
A:Tarlec number: A91865; MUID:87191999; PMID:2883086
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A;Residues: 1-291 <PRO>
A;Cross-references: GB:M12681; NID:9178797; PIDN:AAA51753.1;
A;Cleeb, S.S.; Motulsky, A.G.; Albers, J.J.
Proc. Natl. Acad. Sci. U.S.A. 82, 4983-4986, 1985
A;Title: A partial cDNA clone for human apoliprotein B.
A;Reference number: A25774; MUID:85270450; PMID:3860836
A;Accession: A25774
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A;Residues: 485-617,'A',619-1044 <LA2>
A;Cross-references: GB:M12480; NID:g178791; PIDN:AAA51751.1; PID:g178792
R;Procter, A.A.; Hardman, D.A.; Schilling, J.W.; Miller, J.; Appleby, V.; Chen, G.C.; Kiproc. Natl. Acad. Sci. U.S.A. 83, 1467-1471, 1986
A;Title: Isolation of a cDNA clone encoding the amino-terminal region of human apolipopy A;Accession: A24817
A;Accession: A24088; MUID:86149325; PMID:3513177
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A; Residues: 1-97, 'I', 99-617, 'A', 619-941, 'YYIWSLPPKP', 951-1138, 'PTGRLPNCFSNGLICYSLWLHSFQHA; CYCOSB-TEFEVENCES: GB.M14081; NID:g178795; PIDN:AAA51752.1; PID:g555189
R; Law, S.W.; Lackner, K.J.; Hospattankar, A.V.; Anchors, J.M.; Sakaguchi, A.Y.; Naylor, Proc. Natl. Acad. Sci. U.S.A. 82, 8340-8344, 1985
A; Title: Human apolipoprotein B-100: cloning, analysis of liver mRNA, and assignment of A:Reference number: A24684; MUID:86094221; PMID:3001697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Molecule type: mRNA
A;Residues: 1-97, 'I',99-328,'V',330-644,'I',646-918,'P',920-3318,'D',3320-3426,'T',3428-
9-4132,'G',4134-4180,'E',4182-4563 (CHE)
A;Cross-references: GB;J02610; NID:9178803; PIDN:AAA35549.1; PID:9178804
A;Cross-references: GB;J02610; NID:9178803; PIDN:AAA35549.1; PID:9178804
A;Protter, A.A.; Hardman, D.A.; Sato, K.Y.; Schilling, J.W.; Yamanaka, M.; Hort, Y.J.; Frotter, A.A.; Hardman, D.A.; Sato, K.Y.; Schilling, J.W.; Yamanaka, M.; Hort, Y.J.; Frotter, A.A.; Arad. Sci. U.S.A. 83, 5678-5682, 1986
A;Reference number: A24320; MUID:86287319; PMID:3461454
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A;Title: The complete cDNA and an ino acid sequence of human A;Reference number: A92556; MUID:87008488; PMID:3759943
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A;Residues: 1-617,'A',619-703,'P',705-792,'R',794-1270,'S',1272-1866,'G',1868-2036,'N',
4189-4220,'M',4222-4563 <LAW>
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Proc. Natl. Acad. S.M.; Higuchi, K.; Hospattankar, A.; Lackner, K.; Lee, N.; Brewer Jr, 71tle: Human liver apolipoprotein B-100 CDNA: complete nucleic acid and derived amino A;Accession: A25267

A.MC16881001: A25267
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   23,'PYW',2327-2352,'H',2354-2398 <HAR>
GB:M17367; NID:9178731; PIDN:AAA51741.1;
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; MUID:87016385; PMID:3763409
PID:g178732
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M.; Li,
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i, W.H.;
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A; Molecule type: mRNA
A; Residues: 2169-2179 < HOS>
A; Note: the sequence shown represents the carboxyl end of apolipoprotein B-48
A; Note: two RNA species, 14.1kb and 7.5kb in length, were isolated from the human
C: kim, T.W.; Weng, S.; Lee, B.; Yang, M.; Gotto Jr., A.M.
Proc. Natl. Acad. Sci. U.S.A. 87, 5523-5527, 1990
A; Title: Isolation and characterization of sulfhydryl and disulfide peptides of h:
A; Contents: disulfide bonds
A; Contents: disulfide bonds
                                                                                                                                                                                                                                                                                                                                                                                      A;Cross references: GB.M18471
A;Experimental source: intestine
A;Note: this mRNA from intestine includes a stop codon c
R;Mchrabian, M; Schumaker, V.N.; Fareed, G.C.; West, R.
Nucleic Acids Res. 13, 6937-6953, 1985
A;Title: Human apolipoprotein B: identification of cDNA
A;Reference number: A24269; MUID:86041888; PMID:3903660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: protein
A;Residues: 51-75;101-110;129-139;158-174;197-207;276-287;298-304;306-314;526-532;538-55
36;1486-1498;1537-1556;1563-1572;1601-1610;1647-1661;1697-1724;1770-1781;1859-1897;1968-
A;Note: these fragments were derived from apo48
B;Hardman, D.A.; Protter, A.A.; Schilling, J.W.; Kane, J.P.
Biochem. Biophys. Res. Commun. 149, 1214-1219, 1987
A;Title: Carboxyl terminal analysis of human B-48 protein confirms the novel mechanism p
A;Reference number: A28002; MUID:88106542; PMID:3426612
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A;Molecule type: mRNA
A;Residues: 2129-2179,2181-2235 <HA2>
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A;Accession: B40133
A;Molecule type: mRNA
A;Residues: 2165-2179 <CH1>
A;Cross-references: GB:M18036; NID:g178799; PIDN:AAA51754.1; PID:g178800
A;Note: this mRNA includes the stop codon of the organ-specific mRNA for
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A; Residues: 'N', 3729-3731,'I', 3733-3875,'A', 3877-3948,'F', 3950-3963,'Y', 3965-3982,'S'
A; Cross-references: GB:M12413; NID:g178735; PIDN:AAA51742.1; PID:g178736
R; Chen, S.H.; Habib, G.; Yang, C.Y.; Gu, Z.W.; Lee, B.R.; Weng, S.; Silberman, S.R.; Science 238, 363-366, 1987
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A;Reference number: A24738; MUID:86042646; PMID:2932736
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Biol. Chem. Hoppe-Seyler 367, 1077-1083, 1986
A;Title: Isolation, expression and characterization of a
A;Reference number: A25572; MUID:87076044; PMID:3024665
A;Accession: A25572
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A;Residues: 4219-4337,'S',4339-4563 <PFI>
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A;Residues: 3846-4298 <SHO>
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;Title: Molecular cloning of human LDL apolipoprotein B cDNA. Evidence for more than ;Reference number: A90084; MUID:86130855; PMID:3841481
le type: protein
es: 28-41;76-97,'I',99-100;175-193;206-215;239-249;259-266;357-399;455-490;512-5
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West, R.; Johnson, D.F.; Kirchgessner,
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A;Contents: annotation; gene structure
R;Wagener, R.; Pfitzner, R.; Stoffel, W.
Biol. Chem. Hoppe-Seyler 368, 419-425, 1987
A;Title: Studies on the organization of the human apolipoprotein B 100 gene
A;Reference number: A90715; MUID:87271140; PMID:2886136
A;Contents: annotation; gene structure
R;Weisgraber, K.H.; Rall Jr., S.C.
J. Biol. Chem. 262, 11097-11103, 1987
A;Title: Human apolipoprotein B-100 heparin-binding sites.
A;Reference number: A92605; MUID:87280197; PMID:3301850
A;Contents: annotation; heparin binding and disulfide bond
R;Dashti, N.; Lee, D.M.; Mok, T.
Biochem. Biophys. Res. Commun. 137, 493-499, 1986
A;Title: Apolipoprotein B is a calcium binding protein.
A;Reference number: A90125; MUID:86242245; PMID:3087360
A;Contents: annotation; calcium binding
R;Carlsson, P.; Olofsson, S.O.; Bondjers, G.; Darnfors, C.; Wiklund, O.; Bj
Nucleic Acids Res. 13, 8813-8826, 1985
A;Title: Molecular cloning of human apolipoprotein B cDNA.
A;Reference number: 137178; MUID:86093680; PMID:3841204
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                                                                                                                                                                                                C; Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron;
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A; Residues: 1-269 <LAW>
A; Cross-references: UNIPROT:Q60537; UNIPROT:Q60536
C; Superfamily: apolipoprotein B
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                                                                                                                                                                                                                                                                                                                                                                                                        R;Law, A.; Scott, J.
J. Lipid Res. 31, 1109-1120, 1990
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A;Residues: 3113,'L',3115-3130,'R',3132-3133,'P',3135-3136,'R' <LE2>
R;Blackhart, B.D.; L'dwig, E.M.; Pierotti, V.R.; Caiati, L.; Onasch,
J. Biol. Chem. 261, 15364-15367, 1986
A;Title: Structure of the human apolipoprotein B gene.
A;Reference number: A92564; MUID:87057153; PMID:2946672
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A;Residues: 873-892,'K',894-896 <LE1>
A;Accession: B22006
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                                                                                                                             Query Match
Best Local
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215
                                                                                                  10;
                                                                                                                     Similarity
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                                                TTRLTRKRGLK 11
TSRLTRKRGLK 225
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                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                     92.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
                                                                                                                     Score 50;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 54; DB 1; Length 4563; Pred. No. 0.091;
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                                                                                                                                                                                                                                                                                                                                                        apolipoprotein PMID: 2373961
                                                                                                                        DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #text_change 09-Jul-2004
                                                                                                                                                Length 269;
                                                                                                Indels
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                                                                                                                                                                                                                                                                                                                                                                                   domain that binds
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                                                                                             Gaps
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RESULT 4

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apolipoprotein B-100 - chicken (fragment)
C;Species: Gallus gallus (chicken)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 09-Jul-2004
C;Accession: E60950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Supertamily: apolipoprotein B
C;Keywords: atherosclerosis; calcium;
F;435-445/Region: receptor binding
F;646-656/Region: receptor binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: UNIPROT:Q60536; GB:M35187
A;Note: this is a revision to the sequence from reference JH0101
R;Smith, T.J.; Hautamaa, D.; Maeda, N.
Gene 87, 309-310, 1990
A;Title: Sequence of the putative low-density lipoprotein receptor-binding regions A;Reference number: JH0101; MUID:90236327; PMID:2332175
A;Contents: annotation
                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Molecule type: mRNA
A;Residues: 1-274 <LAW>
A;Cross-references: UNIPROT:07M2U9
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C;Species: Mesocricetus auratus (golden hamster)
C;Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 09-Jul-2004
C;Accession: JH0102
A; Title: A cross-species A; Reference number: A6095 A; Accession: E60950
                                                          R;Law, A.; Scott, J.
J. Lipid Res. 31, 1109-1120, 1990
                                                                                                                                                                                                            RESULT 6
                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Note: authors translated the C; Superfamily: apolipoprotein B
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Title: A cross-species comparison of the A; Reference number: A60950; MUID:90324804;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Law, A.; Scott, J.
J. Lipid Res. 31, 1109-1120, 1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Accession: A60950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 31-Dec-1993 #sequence_revision 09-Sep-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      apolipoprotein B-100 - rabbit (fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A60950
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Residues: 1-779 < SMI >
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    submitted to GenBank, June 1990 A; Reference number: A38864
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                     Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron; glycoprotein
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Best Local :
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                   ecies comparison of the A60950; MUID:90324804;
                                                                                                                                                                                                                                                                                                                                                                        81.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               e codon GAT for residue 155 as His
B
                                                                                                                                                                                                                                                                                                                                                  Score 44; DB 2;
Pred. No. 0.66;
1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cholesterol metabolism; chylomicron; glycoprotein
                     apolipoprotein B PMID:2373961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       apolipoprotein PMID:2373961
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0.11;
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                                         domain that binds to the LDL
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Conserved hypothetical protein STY3508 [imported] - Salmonella enterica subsp. (C;Species: Salmonella enterica subsp. enterica servar Typhi A;Note: this species has also been called Salmonella typhi C;Date: 09-Nov-2001 #sequence_revision 09-Nov-2001 #text_change 18-Nov-2002 C;Accession: AH0906 R;Parkhill, J; Dougan, G.; James, K.D.; Thomson, N.R.; Pickard, D.; Wain, J.; th, T.; Connerton, P.; Cronin, A.; Davis, P.; Davies, R.M.; Dowd, L.; White, N.
                                    A; Authors:
                                                                                                                                                                               RESULT 8
AH0906
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                                                                                                                                                                                                                                                                                                           A;Cross-references: MGI:88052
(;Superfamily: apolipoprotein B
C;Keywords: atherosolerosis; calcium; cholesterol metabolism; chylomicron; glycoprotein;
F;435-445/Region: receptor binding
F;646-656/Region: receptor binding
                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Molecule type: mRNA
A;Residues: 427-531,'S',533-700 <LAW>
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A;Accession: D60950
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A;Accession: S33128
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: UNIPROT:061314; GB:M35186
R;Smith, T.; Hautamaa, D.; Maeda, N.
submitted to the EMBL Data Library, May 1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Date: 17-Apr-1993 #sequence revision 17-Apr-1993 #text_change 09-Jul-2004
R;Smith, T.J.; Hautamaa D N Model
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Molecule type: DNA
Residues: 1-531,'S',533-784 <SM2>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Molecule type: DNA;Residues: 1-784 <SMI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ane 87, 309-310, 1990
;Title: Sequence of the putative low-density lipoprotein receptor-binding regions of
;Reference number: JH0101; MUID:90236327; PMID:2332175
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A; Residues: 1-275 < LA
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Best Local
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                                                                                                                                                                                                                                     646
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9; Conserv
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         C.; Quail, M.; Rutherford, K.; Simmonds,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
9; Conserva
                                                                                                                                                                                                                                                                                   Conservative
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81.8%; Pred. No.
                                                                                                                                                                                                                                                                        Score 44; DB;
Pred. No. 1.7;
1; Mismatches
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   M.; Skelton,
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Stevens,
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A; Experimental
                                                                                                                                A; Molecule type: DNA
A; Residues: 1-309 <STO>
                                                                                                                                                                  A;Title: Genome sequence of A;Reference number: A85480; A;Accession: E85985 A;Status: preliminary A:Molecule techniques
                                                                                                                                                                                                            R;Perna, N.T.; Plunkett III, G.; Burland, V.; Mau, B.; Glasr iller, L.; Grotbeck, E.J.; Davis, N.W.; Lim, A.; Dimalanta, Nature 409, 529-533, 2001
                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                             RESULT 10
                                                            Superfamily:
                                                                                      Cross references: UNIPROT: P45476; GB: AE005174; Experimental source: strain 0157:H7, substrain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Gene: yhcc
C;Superfamil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hypothetical 34.6 kD protein in arcB-gltB intergenic region - Escherichia coli C;Species: Escherichia coli C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004 C;Accession: E6512 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004 R;Blattner, F.R.; Plunkett III, G.; Bloch, C.A.; Perna, N.T.; Burland, V.; Rile A.; Rose, D.J.; Mau, B.; Shao, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: DNA
A; Residues: 1-309 < BLAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Science 277, 1453-1462, 1997

A;Title: The complete genome sequence of Escherichia coli K-12.

A;Accession: E65112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Superfamily: Methanococcus jannaschii conserved hypothetical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Experimental source:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cross-references: UNIPROT:P45476;
Experimental source: strain K-12,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Status: preliminary; nucleic acid sequence not shown; translation not
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C;Superfamily: Methanococcus jannaschii conserved hypothetical protein MJ0486
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     75.9%;
72.7%;
                                                                                                                                                                         of enterohemorrhagic Escherichia coli O157:H7
30; MUID:21074935; PMID:11206551
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72.7%;
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Pred.
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                                                                                    PIDN:AAG58345.1; GSPDB:G
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Potamousis,
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F;1685-1703/Domain: transmembrane #status predicted <TM2>
F;1746-1764/Domain: transmembrane #status predicted <TM3>
                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Gene: bimE
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J. Biol. Chem. 265, 16132-16137, 1990
A;Title: A negative regulator of mitosis in Aspergillus is a putative membrane-spanning
A;Reference number: A37879; MUID:90375468; PMID:1697851
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A;Accession: B91140
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A;Residues: 1-2073 <ENG>
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                                                                                                                                                                                                                                                                                                                              ;Keywords: cell cycle control; mitosis; transmembrane protein
;1623-1643/Domain: transmembrane #status predicted <TMl>
;1685-1703/Domain: transmembrane #status predicted <TM2>
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;Date: 18-Jul-2001 #sequence_revision 18-Jul-2001 #text_change 09-Jul-2004
;Accession: B91140
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Kasunaga, T.; Kuhara, S.;
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Shiba, T.; Hattori,
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RIMD 0509952
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RESULT 13

588 TSSLMRKRGLK

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C;Species: Sus scrofa domestica (domestic pig)
C;Date: 31-Mar-1992 #sequence revision 31-Mar-1992 #text
C;Accession: JT0382; I46567; T46568
R;Maeda, N.; Ebert, D.L.; Doers, T.M.; Newman, M.; Hasler
Gene 70, 213-229, 1988
A;Title: Mccular genetics of the apolipoprotein B gene
A;Reference number: JT0382; MUID:89108006; PMID:2905687
A;Accession: JT0382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Cross-references: UNIPROT:Q29020; UNIPROT:Q29433
R;Maeda, N.; Ebert, D.L.; Doers, T.M.; Newman, M.; H
Gene 69, 213-229, 1988
A;Title: Molecular genetics of the apolopoprotein B
A;Reference number: I46567
A;Accession: 146567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Title: Presence of an extended duplication in the putative A;Reference number: I51362; MUID:95324549; PMID:7541349 A;Accession: S65460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       apolipoprotein B - Atlantic salmon (fragment) C;Species: Salmo salmo (Atlantic salmon) C;Date: 04-Dec-1997 #sequence revision 12-Dec-1997 C;Accession: S65460; I51362
                                                                                                                                                                    A; Introns: 39/3; 88/3; 159/2; 238/3; 1133/1; 1171/2; 1232/3 A; Note: the list of introns may be incomplete
                                                                                                                                                                                                                C;Genetics:
A;Gene: apoB
                                                                                                                                                                                                                                                            A;Cross-references: GB:M22647; NID:g164367; PIDN:AAA30997.1; PID:g164370 C;Comment: Apolipoprotein B is the predominant protein component of the low-density
                                                                                                                                                                                                                                                                                                       A; Molecule type: DNA
A; Residues: 239-1778 <MA3>
                                                                                                                                                                                                                                                                                                                                                A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: DNA
A;Residues: 1-B, S',10-238 <MA2>
A;Cross-references: GB:M22646; NID:g164366; PIDN:AAA30996.1;
A;Accession: I46568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-1778 < MAE>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Gene:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Experimental source: liver
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A;Cross-references: UNIPROT:Q91480;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Status: translated from GB/EMBL/DDBJ
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;Keywords: calcium; cholesterol
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apolipoprotein B - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Species: Sus scrofa domestica (domestic pig)
C;Species: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 09-Jul-2004
R;Purtell, C; Maeda, N; Ebert, D.L.; Kaiser, M.; Lund-Katz, S.; Sturley, S.L.; Kodoyia
A;Purtell, C; Maeda, N; Ebert, D.L.; Kaiser, M.; Lund-Katz, S.; Sturley, S.L.; Kodoyia
A;Pitle: Nucleocide sequence encoding the carboxyl-terminal half of apolipoprotein B frc
A;Reference number: 146569; MUID:94014802; PMID:8409766
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type; DNA
A;Residues: 1-2629 <PUR>
A;Cross-references: UNIPROT:Q29021; GB:L11235; NID:g164371; PIDN:AAA74655.1; PID:g951375
C;Genetics:
A;Genetics:
A;Genetics:
A;Introns: 1984/1; 2022/2; 2083/3
C;Superfamily: apolipoprotein B
Search completed: January 12, 2005, 13:31:57 Job time : 21.2258 secs
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Marotti K.R., Melchior G.W.;

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"Analysis of the human apolipoprotein B;
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GO:0005576; C:extracellular; NAS.
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MEDLINE-87161758; PubMed=3030729;
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                                                               Grundy
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neu M.,
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SEQUENCE FROM N.A.
Rieder M.J., Carrin
Ahearn M.O., Kuldan
Nickerson D.A.;
Submitted (JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 population."
Hum. Mutat.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Arveiler D., Marques-Vidal P., Luc G., Roizes (
"Detection of new variants in the apolipoprotei PCR-SSCP.";
                                                                                                                                             01-OCT-2003 (TrEMBLrel.
01-OCT-2003 (TrEMBLrel.
01-MAR-2004 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                           Leren T.P., Bakken K.S., Hoel V., Hjermann I., "Screening for mutations of the apolipoprotein hypocholesterolemia.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VARIANTS FDB GLN-3527 AND CYS-3558.

MEDLINE=97403938; PubMed=9259199;

Rabes J.P., Varret M., Saint-Jore B., Erlich D.,

Krempf M., Giraudet P., Junien C., Bolleau C.;

"Familial ligand-defective apolipoprotein B-100:
                                                                                  Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                      Apolipoprotein B Name=APOB;
                                                                                                                                                                     Q7Z600;
01-OCT-2003
                                                                                                                                                                                              Q7Z600
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=95190020; PubMed=7883971; Publinger C.R., Hennessy L.K., Chatterton J.E., Liu W., Love J. Pullinger C.R., Frost P.H., Malloy M.J., Schumaker V.N., Kane J.P. Mendel C.M., Frost P.H., Malloy M.J., Schumaker V.N., Kane J.P. "Familial ligand-defective apolipoprotein B. Identification of mutation that decreases LDL receptor binding affinity."; J. Clin. Invest. 95:1225-1234(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=91016974; PubMed=2216805; Huang L.-S., Gavish D., Breslow J.L.; Huang L.-Dlymorphism in the human aj "Sequence polymorphism in the human aj Nucleic Acids Res. 18:5922-5922(1990)
                                                                                                          Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AND ILE-3921.
MEDLINE-98141125;
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                                                                                                                                                                                                                                                          3384
                                                                                                                                                                                                                                                                                                                                                                 FUNCTION: Apolipoprotein B is a major protein constituent of chylomicrons (apo B-48), LDL (apo B-100) and VLDL (apo B-100). A B-100 functions as a recognition signal for the callular binding and internalization of LDL particles by the apoB/E receptor.
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                        Carrington
Kuldanek S.
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n K.S., Hoel V.,
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                                                                                   Chordata;
Primates;
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01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Apolipoprotein B (Fragment).
Diceros bicornis (Black rhinoceros).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Perissodactyla; Rhinocerotidae;
SEQUENCE FROM N.A.

MEDLINE=22761261; PubMed=12878460;

Amrine-Madsen H., Koepfli K.-P., Wayne R.K., i

"A new phylogenetic marker, apolipoprotein B,

evidence for eutherian relationships.";
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Q1-CCT-2003 (TrEMBLrel. 25, Last sequence update)
Q1-CCT-2003 (TrEMBLrel. 25, Last sequence update)
Q1-CCT-2003 (TrEMBLrel. 25, Last annotation update)
Apolipoprotein B (Fragment).
Apolipoprotein B (Fragment).
Glaucomys volans (Southern flying squirrel).
Glaucomys volans (Southern flying squirrel).
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Metazoa; Chordata; Sciurognathi; Sciuridae; Petauristinae;
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MEDILINE=22761261; PubMed=12878460;

Amrine-Madsen H., Koepfli K.-P., Wayne R.K.

"A new phylogenetic marker, apolipoprotein

evidence for eutherian relationships.";

Mol. Phylogenet. Evol. 28:225-240(2003).

EMBL; AY243379; AAP50767.1; -.
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Matches 10
SEQUENCE FROM N.A.

MEDLINB=22761261; PubMed=12878460;

Amrine-Madsen H., Koepfli K.-P., Wayne R.K., 'Anew phylogenetic marker, apolipoprotein B, evidence for eutherian relationships.";

Mol. Phylogenet. Evol. 28:225-240(2003).
                                                                                                                                                                                                                                    Q7YQM7 PRELIMINARY; PRT; 438 AA.
Q7YQM7;
01-OCT-2003 (TrEMBLrel. 25, Created)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
Apolipoprotein B 100 (Fragment).
Name=apoB-100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lipoprotein.
NON_TER
NON_TER
4:
SEQUENCE 43:
                                                                                                                                              Pteropodinae; Pteropus.
NCBI_TaxID=9405;
                                                                                                                                                                              Mammalia; Eutheria; Chiroptera; Megachiroptera;
                                                                                                                                                                                                  Pteropus hypomelanus (Small flying fox).
Eukaryota, Metazoa, Chordata, Craniata,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.

MEDILINE=22761261; PubMed=12878460;

Amrine-Madsen H., Koepfli K.-P., Wayne R.K., ("A new phylogenetic marker, apolipoprotein B, evidence for eutherian relationships.";

Mol. Phylogenet. Evol. 28:225-240(2003).
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Q7YQM8;
01-OCT-2003
01-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nyctimene albiventer (Common tube-nosed fruit bat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebzata; Euteleostomi;
Mammalia; Eutheria; Chiroptera; Megachiroptera; Pteropodidae;
Pteropodinae; Nyctimene.
NCBI_TaxID=48988;
[1]
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SEQUENCE 43
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Name=apoB-100;
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EMBL; AY243375; AAP50763.1;
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436
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Pred. No.
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Q7YR08;
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Q7YR04;
01-QCT-2003
01-QCT-2003
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Chaetophractus villosus (South American armadillo).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalla; Eutheria; Edentata; Dasypodidae; Chaetophractus.

MCBI_TaxID=29080;
                                                                                                                                                                                                                                                                                                                                       01-OCT-2003 (TrEMBLrel. 25, Created)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                     evidence for eutherian relaming. Phylogenet. Evol. 28:2: EMBL; AY243378; AAP50766.1;
                                                                              MEDLINE=22761261; PubMed=12878460;
Amrine-Madsen H., Koepfli K.-F., Wayne R.K.
"A new phylogenetic marker, apolipoprotein
evidence for eutherian relationships.";
Mol. Phylogenet. Evol. 28:225-240(2003).
                                                                                                                                                                   MEDLINE=22761261;
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Rousettus amplexicaudatus (Common rousette).
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Chiroptera; Megachiroptera; Pteropodidae;
Pteropodinae; Rousettus.
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01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                      Lipoprotein.
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MEDLINE=22761261; PubMed=12878460;
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1. Phylogenet Bvol 28:225-240(2003).
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438 AA;
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Pred. No.
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                                                                                                                      Wayne R.K., S
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                                                                                                                      Springer M.S.;
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RESULT 13
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Lipoprotein.
NON_TER
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SEQUENCE 44
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01-OCT-2003 (TrEMBLrel. 25,
01-OCT-2003 (TrEMBLrel. 25,
01-MAR-2004 (TrEMBLrel. 26,
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01-OCT-2003
01-OCT-2003
                                                                 MEDLINE=22761261; PubMed=12878460; Anrine-Madsen H., Koepfli K.-P., Wayne R.K. Marine-Madsen H., Koepfli K.-P., Wayne R.K. "A new phylogenetic marker, approprietion ovidence for eutherian relationships."; Mol. Phylogenet. Evol. 28:225-240(2003). EMBL; AY243369; AAP50757.1; -.
                                                                                                                                                                               Apolipoprotein B (Fragment).
Hydrochoerus hydrochaeris (Capybara) (Carpincho).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Hystricognathi; Hydrochaeridae;
                                                                                                                                                                                                                                                                           Q7TN71
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Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-OCT-2003 (TYEMBLrel. 25, Created)
01-OCT-2003 (TYEMBLrel. 25, Last sequence update)
01-OCT-2003 (TYEMBLrel. 25, Last annotation update)
Apolipoprotein B 100 (Fragment).
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                                              PROSITE;
                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                          NCBI_TaxID=10149;
                                                                                                                                                                        Hydrochaeris.
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EMBL; AF548417; AAP97373.1;
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Amrine-Madsen H., Koepfli K.-P., Wayne R.K.
Pan new phylogenetic marker, apolipoprotein
evidence for eutherian relationships.";
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Amrine-Madsen H.,
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                                           ; IPR000871; Beta_lactamase_A.
PS00146; BETA_LACTAMASE_A; UNKNOWN
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Pred. No.
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Pred. No. 0.23;
1; Mismatches
  CBBA2DD53D7A18D2 CRC64;
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RESULT 15
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AC Q6053
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Best Local Similarity
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Best Local S
Matches 10
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Q60536;
Q1-NOV-1996 (TrEMBLrel. 01, Created)
Q1-NOV-1996 (TrEMBLrel. 01, Last sequence update)
Q1-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Hamster apolipoprotein (apoB) (Fragment).
Mesocricetus auratus (Golden hamster).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
                                                                                        SEQUENCE FROM N.A.

MEDILINE-90236327; PubMed=2332175;

Smith T.J., Hautamaa D., Maeda N.;

Smith T.J., Hautamaa D., Maeda N.;

"Sequence of the putative low-density lipoprotein receptor-binding regions of apolipoprotein B in mouse and hamster.";

Gene 87:309-310(1990).

EMBL; M35187; AAA37059.1; -.

EVEN; C60950; C60950.

PIR; JH0102; JH0102.
                                Lipoprotein.
NON_TER
NON_TER 7
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Q7TN72;
Q1-CCT-2003 (TrEMBLrel. 25, Created)
Q1-CCT-2003 (TrEMBLrel. 25, Last sequence update)
Q1-CCT-2003 (TrEMBLrel. 25, Last annotation update)
Q1-CCT-2003 (TrEMBLrel. 25, Last annotation update)
Apolipoprotein B (Fragment).
Erethizon dorsatum (North American porcupine).
Erethizon dorsatum (North American porcupine).
Eukaryota, Metazoa, Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Hystricognathi; Erethizontidae;
          SEQUENCE
                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=10036; [1]
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EMBL; AY243368; AAP50756.1; "..."
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Pred. No. 0.23;
1; Mismatches 0; Indels
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Pred. No. 0.23;
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22	44	100.0	377	N	AAR72704
23	44	100.0	377	N	AAR3403:
24	44	100.0	2463	8	ADJ57400
25	44	100.0	3923	N	AAV31237

45	44	43	42	41	40	39	38.	37	36	35	34	ω ω	32	31	30	29	28	27	26
39	39	39	39	39	40	40	44	44	44	44	44	44	44	44	44	44	44	44	44
88.6	88.6	88.6		88.6		90.9	100.0	100.0	100.0	100.0		100.0			100.0			100.0	100.0
10	10	10	10	10	10	. 10	4590	4563	4563	4563	4563	4563	4563	4563	4563	4561	4560	4536	4536
N	N	N	N	N	N	ผ	4	œ	œ	œ	œ	7	σ	σ	Ŋ	7	ຫ	N	N
AAY30688	AAY30686	AAY30693	AAY30692	AAY30690	AAY30687	AAY30682	AAU33184	ADO33447	ADO33445	ADH18870	ADH18871	ADF43408	ABU79140	ABR40253	AA015893	ADD48677	AAU98981	AAW96826	AAW41262
Aay30688 Apo-	Aay30686 Apo-	Aay30693 Apo	•	Aay30690 Apo-	Aay30687 Apo-	Aay30682 Apo-	Aau33184 Novel	Ado33447 Human	Ado33445 Human	_	Adh18871 Huma	Adf43408 Apo	Abu79140 Apo	Abr40253 Human	Aao15893 Human	Add48677 Human	Aau98981 Human	Aaw96826 Amir	Aaw41262 Apolig
Apo-B100	Apo-B100	Apo-B100	Apo-B100	Apo-B100	-B100	Apo-B100	el hum			an apo	Human apo	Apolipopr	Apolipopr		an apo	an Pro	an apo	Amino aci	lipopr

ALIGNMENTS

RESULT 1
AAW57205
ID AAW5
XX AAW5
XX AAW5
XX AAW5
XX AAW6
XX A Apo B; binding site; receptor; cancer; drug delivery; anticancer; growth supplement; non-natural lipid particle; low density lipopr LDL; receptor component; apo B100 receptor site. 27-SEP-1996; 02-APR-1998. Synthetic. 03-AUG-1998 (first entry) AAW57205 standard; peptide; (UYST) UNIV STRATHCLYDE. 25-SEP-1997; WO9813385-A2. Apo B binding site peptide 2. AAW57205; 96GB-00020153 97WO-GB002610. 11 ₹ density lipoprotein;

Halbert GW, Owens MD, Baillie ດ

WPI; 1998-230637/20.

Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells that express this receptor.

Claim 12; Page 52; 73pp; English.

The present sequence represents a specifically claimed Apo B binding site peptide which can be used as a component of a non-naturally occurring, receptor-competent low density lipoprotein (LDL) particle of the present invention. The LDL particle comprises at least 1 peptide component that has at least 1 binding site for an apo B protein receptor and at least 1 lipophilic substituent. Also described in the invention are peptides containing an apo B binding sequence with at least 70% identity with sequences: KAEYKKNKHRH (1) or TTRLTRKRGLK (2), or their dimers. Non-naturally occurring, receptor-competent LDL particles are useful as: (i) drug-targeting vectors for delivering anticancer drugs to cancer cells that express an apo B protein receptor, and (ii) additives for cell culture media especially as growth supplements. Non-naturally occurring,

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The present sequence represents a specifically claimed Apo B 100 binding CC Site peptide analogue which can be used as a component of a non-
CC naturally occurring, receptor-competent low density lipoprotein (LDL)
CC particle of the present invention. The LDL particle comprises at least 1
CC peptide component that has at least 1 binding site for an apo B protein
CC invention are peptides containing an apo B binding sequence with at least
CC dimers. Mon-naturally occurring, receptor-competent LDL particles are
CC dimers. Mon-naturally occurring, receptor-competent LDL particles are
CC cancer cells that express an apo B protein receptor and (ii) additive to a sequence, which is large and tends to aggregate, to provide binding
CC apo B sequence, which is large and tends to aggregate, to provide binding
CC affinity to an apo B protein receptor and (ii) additive to an apo B protein receptor and (ii) additive to an apo B protein receptor and (ii) additive to apo B sequence, which is large and tends to aggregate, to provide binding
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                                                                                                                                                                                                                                    Claim 13; Fig 7; 73pp; English.
                                                                                                                                                                                                                                                  Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells that express this receptor.
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Best Local Similarity 100.0%;
Matches 9; Conservative (
                                                                                                                                                                                                                                                                                                                             WPI; 1998-230637/20.
                                                                                                                                                                                                                                                                                                                                                              Halbert GW,
                                                                                                                                                                                                                                                                                                                                                                                                                    27-SEP-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Apo B 100 binding site peptide analogue peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         receptor-competent LDL particles do not require the complete apo B sequence, which is large and tends to aggregate, to provide binding affinity to an apo B protein receptor
                                                                                                                                                                                                                                                                                                                                                                                 UNIV STRATHCLYDE.
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                                                                                                                                                                                                                                                                                                                                                                                                             96GB-00020153
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                note= "attached to retinoic acid"
                                                                                                                                                                                                                                                                                                                                                     Baillie G;
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Pred. No. 0.089;
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CC The present sequence is an analogue of apoprotein B 100. The peptide, CC which has Ly85 conjugated with malondialehyde (MDA), inhibits uptake of CC apoprotein B-based low density lipoprotein (LDL) (or partly modified CC arberosclerosis. Atherosclerosis in treatment and diagnosis, especially for CC atherosclerosis. Atherosclerosis is characterised by thickening and its CC degeneration of the arterial intima by, firstly, the formation of fatty CC plaques within the artery. Foam cells and, secondly, the formation of fibrous CC oxidised LDL by macrophages via a scavenger receptor, which causes cells cc to take up more cholesterol than necessary via the high affinity LDL cc epitopes which prevent oxidised LDL from being taken up by the scavenger coptor, so preventing LDL uptake by the high affinity LDL receptor, and CC possibly preventing LDL uptake by the high affinity LDL receptor, and
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AAW87717
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Sequence 11 AA;
                                                                                                                                                                                                                             Oxidised fragments of apoprotein B-based low density lipoprotein, LDI which inhibits LDL uptake by high affinity LDL receptor, useful e.g. treatment and diagnosis of atherosclerosis.
                                                                                                                                                                                                                Claim 2; Page 2; 23pp; English.
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Best Local ;
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                                                                                                                                                                                                                                                                                                                            Lunec J,
                                                                                                                                                                                                                                                                                                                                               (UYLE-) UNIV LEICESTER.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "conjugated to malondialdehyde (MDA) "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
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Pred. No. 0.0:
0; Mismatches
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Query Match 100.0%; Sest Local Similarity 100.0%; Sest Local Similarity 100.0%; Matches 9; Conservative 0;

Score 44; DB 2; Pred. No. 0.089; Mismatches

Length 11; Indels

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                                                                         Matches
                                                                                         Query Match
Best Local :
                                                                                                                                                                                             The invention relates to bone strength and mineralisation regulatory protein (BSMR) and its corresponding nucleic acid sequence. BSMR DNA is useful for the diagnosis or therapy of osteoporosis and for regulating (increasing) bone strength and mineralisation in a human subject by activating bone density regulating transmembrane receptor (BSMR protein). An expression vector comprising a promoter that is operably linked to BSMR DNA is useful for modulating bone density and for enhancing bone strength and mineralisation in a mammal cell. Composition comprising a BSMR effector is useful for treating osteoporosis and is useful particularly as a coating for prosthetic devices and surgical implants. BSMR is useful for screening lead pharmaceutical agents as BSMR effectors, which may be used to treat a range of eye disorders such as diabetic retinopathy, hypertensive retinopathy and retinopathy of prematurity, in which mormal vascular growth and integrity of ocular control of the strength and retinopathy.
                                                                                                                                                                                prematurity, in which vessels is disrupted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bone strength and mineralisation regulatory protein; BSMR; bone strength; mineralisation; ophthalmological; antidiabetic; bone density regulating transmembrane receptor; prosthetic device; surgical implant; diabetic retinopathy; hypertensive retinopathy; therapy; opteoporosis; prematurity; ocular vessel; eye disorder;
                                                                                                                                               Sequence 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Polynucleotide encoding bone strength and mineralization regulatory protein useful for diagnosis or therapy of osteoporosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-AUG-2000; 2000US-0226119P.
22-SEP-2000; 2000US-0234337P.
13-JUL-2001; 2001US-0304851P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 9; Page 78; 124pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Warman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (AVET ) AVENTIS PHARMA SA. (HARD ) HARVARD COLLEGE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-AUG-2001; 2001WO-US041788.
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                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>3</u>
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                                    RLTRKRGLK 9
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RLTRKRGLK
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                                                                       Conservative
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                                                                                         100.0%;
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                                                                                                                                                                              The present sequence
                                                                     0
                                                                                       Score 44; DB 5;
Pred. No. 0.089;
                                                                     Mismatches
                                                                                                                                                                                  is BSMR effector
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                                                                                                    Length 11;
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ADF56451 ID ADF XX

ADF56451 standard; peptide; 11

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RESULT 6

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Query Match Best Local S Matches 9

Similarity 9; Conserv RLTRKRGLK 9

100.0%; Score 44; DB 6; Length 11; llarity 100.0%; Pred. No. 0.089; Conservative 0; Mismatches 0; Indels

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RESULT 5
ABU07938
ID ABU0
AC AC ABU0
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AC AC AC AC AC
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                                                                                          The invention describes a molecule (I) inhibiting uptake by the high CC affinity low density lipoprotein (LDL) receptor of LDL or its partially CC modified form. (I) And an antibody (II) that binds (I) are useful in the CC manufacture of a medicament for inhibiting uptake by the high affinity CC LDL receptor of LDL or a partially modified form of it. (I) And (II) are CC useful in the diagnostic test for oxidised LDL, or antibody specific CC against oxidised LDL, which will cause uptake by the high affinity LDL CC or (II) with a sample; (b) detecting an antibody-antigen binding reaction CC; and (C) correlating the detection of the antibody-antigen binding CC reaction with the presence of oxidised LDL, or antibody specific against CC oxidised LDL, which will cause uptake by the high affinity LDL receptor CC of LDL or a partially modified form of it. (I) Is useful as an immunogen, CC e.g., for the production of antibodies, and particularly in the treatment CC and diagnosis of atherosclerosis. (I) And (II) are useful as reagents in CC diagnostic tests, and for preventing foam cell formation. This is the combibit uptake of the high affinity low density lipoprotein B 100 used to combibit uptake of the high affinity low density lipoprotein (LDL) by the
   Sequence 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (LUNE/)
(BEVA/)
(GRIF/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New molecule useful for diagnosing oxidized low density lipoprotein (LDL), and for inhibiting the uptake of LDL by high affinity LDL receptor, or its partially modified form.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lunec J,
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LDL; LDL receptor
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BEVAN R.
GRIFFITHS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98WO-GB000677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9908-00398902
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         residues 3359-3369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       peptide; 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Griffiths H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
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ADF56451;

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RESULT 7
AAW41280
ID AAW4
XX AAW4
AC AAW4
XX 19-M
XX 19-M
XX APO1
XX APO1
XX AD1
KW AAL1
                                                                                                                                                                                                                                                                                CC The invention relates to a molecule comprising one of three fully defined complished is conjugated with malondialdehyde (MDA) and inhibits uptake by the high affinity low density lipoprotein (LDL) receptor or its partially modified form. The molecule is useful for treatment or diagnosis of the CC inhibiting uptake by the high affinity LDLR or its partially cCC form. The molecule is useful for treatment or diagnosis of the CC gpecific against oxidised LDL or oxidised LDL or its partially modified cause uptake by the high affinity LDLR or its partially modified CC The molecules of the High affinity LDLR or its partially modified cause uptake by the high affinity LDLR or its partially modified condenses and antibodies are for diagnosting and treating which will atherosclerosis. The present sequence represents a human apolipoprotein B
                                                                                                                                                                                                                                            Query Match
Best Local S
Anti-coagulant; apolipoprotein B-100; apoB-100; metastatic spread; thromboplastin-mediated process; cancer; inhibitor; blood coagulation; professis; cellular differentiation; apoptosis; KRAD-14;
                                                                                                                                                                                                                                     Matches
                                                                   Apolipoprotein
                                                                                           19-МАУ-1998
                                                                                                                        AAW41260 standard; peptide; 12 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                      New molecule, useful for treating and diagnosing atherosclerosis, comprises 11 amino acid sequence conjugated with malondialdehyde and inhibits low density lipoprotein receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (LUNE/) LUNEC J.
(BEVA) BEVAN R.
(GRIF/) GRIFFITHS H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-697154/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lunec J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-FEB-2003; 2003US-00358594.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2003157567-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                human; apolipoprotein B 100; malondialdehyde; MDA;
low density lipoprotein; high affinity LDL receptor;
high affinity LDLR uptake inhibitor; atherosclerosis;
                                                                                                                                                                                                 1 RLTRKRGLK 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human apolipoprotein B 100 fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-FEB-2004
                                                                                                                                                                                                                                   Similarity
9; Conserv
                                                                                                                                                                                   RLTRKRGLK 9
                                                                                   (first entry)
                                                                                                                                                                                                          ilarity 100.0%; Score 44; DB 7; Length 11;
Conservative 0; Mismatches 0; Indels
                                                            B-100 fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bevan R, Griffiths
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9908-00398902,
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                                                                                                                                                                                                                                                                                                                                                                                                                                    English.
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                                                                                                                                                                                                      Gaps
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                                                                                                                                                                       RESULT 8
AAW57207
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                                                                                                           03-AUG-1998
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Query Match
Best Local Similarity
Matches 9; Conserve
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                              Key
Modified-site
                                                                                  Apo B; binding site; receptor; cancer; drug delivery; anticancer; growth supplement; non-natural lipid particle; low density lipoprotein; LDL; receptor component; apo B100 receptor site.
                                                                                                                                                                       Apo B 100 binding site peptide analogue peptide B.
                                                                                                                                                                                                                                                                                                AAW57207 standard; peptide; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide fragments of apo:lipo:protein B-100 with anticoagulant activity used for treating or preventing coagulation, inhibiting angiogenesis, cell differentiation and apoptosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 9; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1998-008798/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UNICO ) ROYAL FREE HOSPITAL SCHOOL MED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-MAY-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                       1 RLTRKRGLK 9
                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                             llarity 100.0%; Score 44; DB 2; I Conservative 0; Mismatches 0;
                                              Location/Qualifiers
"attached to retinoic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96GB-00009702.
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RESULT 9
AAW22911
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Best Local S
Matches 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            naturally occurring, receptor-competent low density lipoprotein (LDL) particle of the present invention. The LDL particle comprises at least 1 peptide component that has at least 1 binding site for an apo B protein receptor and at least 1 lipophilic substituent. Also described in the invention are peptides containing an apo B binding sequence with at least 10% identity with sequences: KAEYKNKHRH (1) or TRLIMKRGLK (2), or their dimers. Non-naturally occurring, receptor-competent LDL particles are useful as: (1) drug-targeting vectors for delivering anticancer drugs to cancer cells that express an apo B protein receptor, and (ii) additives for cell culture media especially as growth supplements. Non-naturally occurring, receptor-competent LDL particles do not require the complete apo B sequence, which is large and tends to aggregate, to provide binding affinity to an apo B protein receptor
                                                                                                                                                    Synthetic
                                                                                                                            WO9700889-A1
          (ASAH ) ASAHI
(ASAH ) ASAHI
                                                 21-JUN-1995;
                                                                           21-JUN-1996;
                                                                                                     09-JAN-1997
                                                                                                                                                                                            Low density;
                                                                                                                                                                                                                      Low density
                                                                                                                                                                                                                                                02-OCT-1997
                                                                                                                                                                                                                                                                          AAW22911;
                                                                                                                                                                                                                                                                                                AAW22911 standard; peptide; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence represents a specifically claimed Aposite peptide analogue which can be used as a component of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 13; Fig 7; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Halbert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-SEP-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                  RLTRKRGLK 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ξ,
                                                                                                                                                                                                                     lipoprotein binding peptide
                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                            lipoprotein; LDL; binding; absorbent; removal; body fluid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      this receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Owens MD,
                                                                                                                                                                                                                                              (first
          MEDICAL CO LTD.
                                                                           96WO-JP001734.
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                                                                                                                                                                                                                                              entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                Score 44; DB:
Pred. No. 0.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 13;
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RESULT 10
AAW41261
ID AAW41
AC AAAA4
AC AAW41
AC
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Best Local S
Matches 9
This sequence is an example of the peptide of the invention. It has the formula (I), or their variants with one or more internal deletions, insertions or substitutions, while retaining anti-coagulant properties of apolipoprotein B-100 (apoB-100). Z1-KAQ-X1-KKNKHRHS-X2-T-Z2 (I) X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, or 1-47 amino acids (aa); Z2 = the C terminus of the peptide, a terminal amide group or 1-77 aa. Compositions containing the peptide are used for simultaneous, separate or sequential treatment of cancer, particularly to prevent
                                                                                                                                                                                                                                                                                                                    Peptide fragments of apo:lipo:protein B-100 with anticoagulant activity used for treating or preventing coagulation, inhibiting angiogenesis, cell differentiation and apoptosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present low density lipoprotein (LDL) binding peptide can be used an absorbent to remove LDL from body fluids, or as a LDL binding reage the peptide can be prepared easily and at low cost, and has excellent stability and preservability. It specifically binds LDL, and does not cause bradykinin production, white blood cell activation or blood
                                                                                                                                                                                                                                                                 Disclosure; Page 22; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     prothrombinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Anti-coagulant; apolipoprotein B-100; apoB-100; metastatic spread; thromboplastin-mediated process; cancer; inhibitor; blood coagulat angiogenesis; cellular differentiation; apoptosis; KRAD-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1998-008798/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-MAY-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9743311-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (UNLO ) ROYAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               agglutination
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide binding body fluids and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1997-087320/08
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RLTRKRGLK 9
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ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FREE HOSPITAL SCHOOL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               complex.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96GB-00009702
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ettelaie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Z
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Pred. No. 0.12;
Mismatches
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Indels

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Gaps

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Length 15;

Query Match
Best Local Similarity 100.0%; Score 44; DB 2;
Matches 9; Conservative 0; Mismatches 0;

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CC cancers (particularly non-small cell lung carcinoma), diabetes, cystic collars, and arteriosclerns; and arteriosclerns; and arteriosclerns; and arteriosclerns; cell lung carcinoma), diabetes, cystic cells, in the polynomal of the support of su
                                                                                                                                                                                                                                                                                     Claim 19; Fig 13D; 293pp; English.
                                                                                                                                                                                                                                                                                                                                                                                  Composition used for del
                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1999-070331/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Guevara JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (BAYU) BAYLOR COLLEGE MEDICINE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              გგგგგგგგგ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human apolipoprotein B-100; apoB-100; very-low density lipoprotein; binding; in vivo transport; nucleic acid; binding in vivo transport; nucleic acid; binding domain; non-small cell lung carcinoma; diabetes; arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.0%; Score 44; DB 2;
Matches 9; Conservative 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ApoB-100 nuclear localisation signal sequence, residues 3353-3367.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW96892 standard; peptide; 15 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      metastatic spread. They are also used to inhibit thromboplastin-mediated during or after surgery or in cases of heart attack, coagulation (e.g. which is active as such as such as part of a 98-aa peptide, inhibit after surface of the prothrombinase complax; and to a poptisis. KRAD-14, the surface of thromboplastin and prevents activation of the surface of thromboplast, and prevents activate smaller than apoB-100, they act more quickly in. Since (I) are much
                                                                                                                                                                                                                                                                                                                                       ion comprising nucleic acid bound delivering nucleic acid to cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hoogeveen RC,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97US-00874807.
98US-00079030.
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Moore Jp;
                                                                                                                                                                                                                                                                                              to LDL or VLDL lipoprotein . for gene therapy and antisense
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RESULT 13
AAW57208
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        03-AUG-1998
                         AAW57208;
                          AAW57208 standard; Peptide; 22 AA.
                                                                                                                             The invention relates to a novel ligand for binding a target biomolecule, which comprises a peptide having at least one sulphated or sulphonated charged amino acids. The movel ligands can be used for the treatment of invantion acids the movel ligands can be used for the treatment of invantion acide arthritis, diabetic retinopathy and hypoxia.
                                                                                                                                                                                                      Use of a ligand comprising of at least one sulfated or sulfonated amino retinopathy and hypoxia.
                                                                                                                                                                                                                                                                 WPI; 2003-300420/29.
                                                                                                                                                                                                                                                                                    Hubbell JA,
                                                                                                                                                                                                                                                                                                                  20-JUL-2001; 2001US-0306726P.
                                                                                                                                                                                                                                                                                                                                 22-JUL-2002; 2002WO-US023419.
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                                                                                       1 RLTRKRGLK 9
                                                                                                                                                                                                                                                                                                                                                                    Cytostatic; antirheumatic; antiarthritic; antidiabetic; ophthalmological, rheumatoid arthritis; hypoxia; diabetic retinopathy; heparin.
                                                                                                                                                                                                                                                                                                                                                                                                                       Heparin binding peptide sequence #28.
                                                                        RLTRKRGLK 16
                                                                                                              Similarity
9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                             10-MAY-2003 (first entry)
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(first entry)
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                                                                                               ilarity 100.0%; Score 44; DB 6; Length 20; Conservative 0; Mismarch. 0.16; Length 20;
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RESULT 14
AAW57209
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                      The present sequence represents a specifically claimed Apo B 100 binding site peptide analogue which can be used as a component of a nonnaturally occurring, receptor-competent low density lipoprotein (LDL) particle of the present invention. The LDL particle comprises at least 1 peptide component that has at least 1 binding site for an apo B protein receptor and at least 1 lipophilic substituent. Also described in the invention are peptides containing an apo B binding sequence with at least 70% identity with sequences: KARYKUNKIRH (1) or TRALTRKRGLK (2), or their dimers. Non-naturally occurring, receptor-competent LDL particles are useful as: (1) drug-targeting vectors for delivering anticancer drugs to cancer cells that express an apo B protein receptor, and (ii) additives for cell culture media especially as growth supplements. Non-naturally occurring, receptor-competent LDL particles do not require the complete apo B sequence, which is large and tends to aggregate, to provide binding affinity from a non-particle sequence.
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growth
Apo B; binding site; receptor; cancer; drug delivery; anticancer;
                            Apo B 100 binding site peptide analogue peptide D.
                                                            03-AUG-1998
                                                                                          AAW57209
                                                                                                                 AAW57209 standard; peptide;
                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                          affinity to an apo B protein receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 13; Fig 7;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B; binding site; receptor; cancer; drug delivery; anticancer; wth supplement; non-natural lipid particle; low density lipoprotein; receptor component; apo B100 receptor site.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     express this receptor.
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                                                                                                                                                                                                                                                     9; Conserv
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                                                                                                                                                                                                                                                    100.0%; Score 44; DB 2; larity 100.0%; Pred. No. 0.17; Conservative 0; Mismatches 0
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                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "attached to
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peptide binding to apo B protein delivering drugs to cancer cells
                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                Length 22;
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RESULT 15 ABR57177

ABR57177 standard; peptide; 23

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RLTRKRGLK 16

29-AUG-2003

(first entry)

Human PDGFR-beta related navigation peptide

SEQ ID NO:25

PDGRR-beta; platelet derived growth factor receptor beta; nanoparticle; delivery; encapsulated molecule; cytostatic; antimicrobial; gene therap; sustained delivery; cell proliferation disorder; infectious disease; genetic defect; aberrant gene regulation.

therapy;

Homo sapiens

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The present sequence represents a specifically claimed Apo B 100 binding site peptide analogue which can be used as a component of a non-comparation of the present invention. The LDL particle of the present invention. The LDL particle comprises at least 1 peptide component that has at least 1 binding site for an apo B protein receptor and at least 1 lippphilic substituent. Also described in the invention are peptides containing an apo B binding sequence with at least 70% identity with sequences: KAEYKNNEHR (1) or TRLTRKRGLK (2), or their dimers. Non-naturally occurring, receptor-competent LDL particles are useful as: (i) drug-targeting vectors for delivering anticancer drugs to cancer cells that express an apo B protein receptor, and (ii) additives occurring, receptor-competent LDL particles do not require the complete occurring, receptor-competent LDL particles do not require the complete affinity for an apo B protein particles do not require the complete affinity for an apo B protein particles do not require the complete affinity for an apo B protein particles do not require the complete affinity for an apo B protein particles do not require the complete affinity for an apo B protein particles do not require the complete affinity for an apo B protein particles do not require the complete affinity for an apo B protein particles do not require the complete affinity for an apo B protein particles do not require the complete affinity for an apo B protein particles do not require the complete affinity for an apo B protein particles do not require the complete affinity for an apo B protein particles do not require the complete affinity for an apo B protein particles do not require the complete affinity for an apo B protein particles do not require the complete affinity for an apo B protein particles do not require the complete affinity for an apo B protein particles do not provide binding
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Best Local :
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                                                                                                                                                                                                                affinity to an apo B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 13; Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-230637/20.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    growth supplement; non-natural lipid particle; low density lipoprotein; LDL; receptor component; apo B100 receptor site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-SEP-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               express this receptor.
                                                               Similarity 9; Conserv
RLTRKKGLK 9
                                                                                                                                                                  22 AA;
                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Owens MD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           96GB-00020153
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                                                                                      100.0%;
                                                                                                                                                                                                                protein receptor
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                                                               Score 44; DB 2
Pred. No. 0.17;
Mismatches
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                                                                                                          Length
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The present invention describes nanoparticles (I) capable of delivery of CC an encapsulated molecule into a living cell, comprising an encapsulation CC acid homologue sequence (II) encapsulated with EM, where the CC time. (I) have cytostatic and antimicrobial activities, and can be used completed extended period of in gene therapy. (I) can be used for sustained delivery and release of a CC homology within (I), and introducing (II) into the subject. (I) can also be used for treating a medical condition of a subject by sustained delivery homologue sequence designed to alleviate symptoms of the medical condition within EM, so that nanoparticles are formed, and delivering the sequence is released over an extended period of time. A pharmaceutical composition comprising (I) can be used for treating a medical over the isolated nucleic acid homologue sequence designed to alleviate symptoms of the medical condition within EM, so that nanoparticles are formed, and delivering the sequence is released over an extended period of time. A pharmaceutical composition comprising (I) can be used for treating a medical condition defect and abservant gene regulation. The nanoparticles are capable of introducing the nucleic acid into the cell very efficiently. The present contains a platelet derived growth factor receptor beta (PDGFR present invention)
                                                                               Matches
                                                                                                   Query Match
Best Local :
                                                                                                                                                      Sequence 23 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nanoparticles for sustained delivery of encapsulated molecule into a living cell, comprising encapsulation media with biodegradable polymer, and isolated nucleic acid homolog sequence encapsulated with medium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 13; Page 32; 97pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-DEC-2001; 2001US-0335837P.
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                        1 RLTRKRGLK 9
                                                                             Similarity 9; Conserv
RLTRKRGLK 23
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                                                                   ilarity 100.0%; Score 44; DB 6; Length 23; Conservative 0; Mismarchoc
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Minimum
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re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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US-09-265-222-20
US-09-269-533A-2
US-09-180-422B-13
US-09-180-422B-17
US-09-269-533A-6
US-09-180-422B-17
US-09-180-422B-17
US-09-079-030-166
US-09-079-030-166
US-09-079-030-18
US-09-079-030-18
US-09-079-030-21
US-09-079-030-215
US-09-079-030-215
US-09-079-030-215
US-09-079-030-215
US-09-079-030-217
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(without alignments)
28.162 Million cell updates/sec
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16, Appl
98, Appli
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223, App
214, App
214, Appl
27, Appli
1, Appli
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2, Appli
3, Appli
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	33	33	33	33	33	33.5	33.5	33.5	33.5	35	37	37	38	38	38	38	39	39
	75.0	75.0	75.0	75.0	75.0	76.1	76.1	76.1	76.1	79.5	84.1	84.1	86.4	86.4	86.4	86.4	88.6	88.6
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ALIGNMENTS	US-08-946-458-2	US-08-462-221-8	US-08-462-221-2	US-08-343-785-8	US-08-343-785-2	US-09-265-222-19	US-09-265-222-18	US-09-265-222-17	US-09-265-222-16	US-09-489-039A-13630	US-09-265-222-10	US-09-265-222-8	US-09-079-030-216	US-09-265-222-4	US-09-265-222-3	US-09-265-222-2	US-09-265-222-12	US-09-265-222-11
	Sequence 2, Appli	Sequence 8, Appli	Sequence 2, Appli	Sequence 8, Appli	Sequence 2, Appli	Sequence 19, Appl		Sequence 17, Appl	Sequence 16, Appl	Sequence 13630, A	Sequence 10, Appl	Sequence 8, Appli	Sequence 216, App	Sequence 4, Appli	Sequence 3, Appli	Sequence 2, Appli	Sequence 12, Appl	Sequence 11, Appl
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APPLICANT: Innerarity, Thomas
APPLICANT: Boren, Jan
FITLE OF INVENTION: METHODS AND TOOLS FOR IDENTIFYING
FITLE OF INVENTION: COMPOUNDS WHICH MODULATE ATHEROSCLEROSIS BY IMPACTING
FITLE OF INVENTION: LDL-PROTEOGLYCAN BINDING
FILE REFERENCE: 220002059700
CURRENT APPLICATION NUMBER: US/09/265,222
CURRENT FILING DATE: 1999-03-05
PRIOR APPLICATION NUMBER: US 60/077,618
PRIOR FILING DATE: 1998-03-10
NUMBER OF SEQ ID NO2: 25
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 20
LENGTH: 10
TYPE: PRT
                                                                                                                                                                                                                                 US-09-269-533A-2
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Sequence 2, Application US/09269533A
Patent No. 6670452
GENERAL INFORMATION:
APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Wens, Moira
APPLICANT: Baillie, George
TITLE OF INVENTION: No. 6670452-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
CURRENT APPLICANTON NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: BINDING
LOCATION: (1)...(10)
OTHER INFORMATION: Putative proteoglycan binding site of wild-type
OTHER INFORMATION: human apo-B100 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                       2 RLTRKRGLK 10
                                                                                                                                                                                                                                                                                                                                                            1 RLTRKRGLK 9
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RESULT 4
US-09-180-422B-13
, Sequence 13, Application US/09180422B
, Patent No. 6444644
                                                                                                                                                                                                         ; OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
                                                                                                                                                 Query Match
Best Local Similarity 100.0%; Score 44; DB 4; L
Matches 9; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 1999-06-01
PRIOR FILING DATE: 1999-06-01
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: FCT/GB97/02610
PRIOR FILING DATE: 1996-09-27
SOFTWARE: PSEQ ID NOS: 7
SOFTWARE: PSEC ID NOS: 7
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-269-533A-3
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                                                                                                                                                                                                                                                  OTHER INFORMATION: Cholesterol linked at C-terminus of peptide analogue
                                                                                                                                                                                                                                                                                           LENGTH: 1

TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
NAME/KEY: misc feature
COTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
LOCATION: (). ()
NAME/KEY: misc feature
COTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
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! IOCATION: ()...()
OTHER INFORMATION: Apo B binding site sequence
US-09-269-533A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Baillie, George
TITLE OF INVENTION: No. 6670452-Naturally CURRENT APPLICATION NUMBER: US/09/269,533A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No. 6670452
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn version 3.0 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 11
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                    1 RLTRKRGLK 9
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                                                                                                         RLTRKRGLK 10
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Similarity 100.0%; Score 44; DB 4; Length 11;
9; Conservative 0; Mismatches 0; Indels
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No. 6670452-Naturally Occurring Lipoprotein Particle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gavin
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                                                                                                                                            Indels
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APPLICANT: Baillie, George
TITLE OF INVENTION: No. 6670452-Naturally Occ
CURRENT APPLICATION NUMBER: US/09/269,533A
PRIOR APPLICATION NUMBER: US/09/269,533A
PRIOR PILING DATE: 1999-06-01
PRIOR PILING DATE: 1997-09-25
PRIOR PILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
NUMBER OF SEQ ID NOS: 7
SOPPMANDE: DATE: 1996-09-27
                                              SOPTWARE: PatentIn version 3.0
SEQ ID NO 4
LENGTH: 13
TYPE: PRT
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US-09-269-533A-4
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MOLECULE TYPE: Peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 13:
                        ORGANISM: Artificial Sequence
WAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                 Patent No. 6670452
                                                                                                                                                                                                                                         APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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SEQUENCE CHARACTERISTICS:
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s 9; Conservative 0
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APPLICANT: BRUCKDORFER, KARL R

ETTELAIE, CAMILLE

TABLE
                                                                                                                                                                                                                                                                                               INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: SADOFF, B.J.
REGISTRATION NUMBER: 36663
REFERENCE/DOCKET NUMBER: 117-268
TELECOMMUNICATION INFORMATION:
TELEPHONE: 7038164000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/180,422B
FILING DATE: 07-Dec-1998
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: 1EM PC COMPUTER: OPERATING SYSTEM: PC-DOS/MS-DOS
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CORRESPONDENCE ADDRESS:
ADDRESSEE: NIXON & VANDERHYE, P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ETTELAIE, CAMILLE
TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED
FROM APOLIPOPROTEIN B-100
                                                                                                                                                                                                                                                                                                                                                                                                 RLTRKRGLK 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 12 amino acids
TYPE: amino acid
STRANDEDNESS: single
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                                                                                                                                                                        George
No. 6670452-Naturally Occurring Lipoprotein Particle
                                                                                                                                                                                                                                                                                                                                                                                                                                             ,0
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RESULT 7
US-09-180-422B-17
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US-09-269-533A-4
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                                                                                                                                         Sequence 17, Application US/09180422B
PATENT NO. 6444644
GENERAL INFORMATION:
APPLICANT: BRUCKDORFER, KARL R
ETTELAIE, CAMILLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Sequence of a peptide synthesized in Comparative Example 7 from Patent No. 6127339
OTHER INFORMATION: L-form F-moc amino acids by solid phase method using an OTHER INFORMATION: automatic peptide synthesizer (9050 plus peptide synthesizer)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 85, App. ... No. 6127339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local (
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SEQ ID NO 85
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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CURRENT APPLICATION NUMBER: US/08/981,1228
CURRENT FILING DATE: 1997-12-18
PRIOR APPLICATION NUMBER: JP 7-176904
PRIOR FILING DATE: 1995-06-21
PRIOR APPLICATION NUMBER: PCT/JP96/01734
PRIOR FILING DATE: 1996-06-21
NUMBER OF SEQ ID NOS: 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PUBLICATION INFORMATION:

AUTHORS: Urban Olsson et al.

TITLE: Binding of a synthestic apolipoprotein B-100 peptide and peptide
TITLE: analogues to chondroitin 6-sulfate: Effects of the lipid environment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Hatanaka, Yoshihiro
APPLICANT: Aritomi, Masaharu
TITLE OF INVENTION: Peptide for binding thereto a low density lipoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: 15
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL: Biochemistry VOLUME: 32 PAGES: 1858-1865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: ()...()
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site NAME/KEY: misc feature
LOCATION: ()...()
                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
nes 9; Conserv
CORRESPONDENCE ADDRESS:
ADDRESSEE: NIXON & VANDERHYE, P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                          NUMBER OF SEQUENCES:
                                                                                             TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED
FROM APOLIPOPROTEIN B-100
                                                                                                                                                                                                                                                                                                                                                                                     1 RLTRKRGLK 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 44; DB 3; ilarity 100.0%; Pred. No. 0.039; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 3; Length 15;
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US-09-079-030-205
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 205, Application US/09079030
Patent No. 6635623
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 9; Conservative 0
SOFTWARE: PATENTIN Release #1.0, Ver CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/079,030
FILING DATE: CONCURRENTLY Herewith CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
NAME: MCM111ian, Nabeela R.
REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARAG:003
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/478-3000
TELEPHONE: 512/478-7577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: 7038164000
TELEPAX: 7038164100
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Guevera, Jr., Juan G.
APPLICANT: Hoogeveen, Ron C.
APPLICANT: Moore, Paul J.
TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID
TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF E
                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
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MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/180,422B

FILING DATE: 07-Dec-1998

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                              ZIP: 77210
                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Houston
                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA
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REFERENCE/DOCKET NUMBER: 1
TELECOMMUNICATION INFORMATION:
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MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 17:
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TYPE: amino acid
STRANDEDNESS: single
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STATE: VA
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P.O. Box 4433
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Pred. No. 0.039;
, Mismatches 0; Indels
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                                                                                                                                                                                                                                    Version #1.30
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EUKARYOTIC CELLS
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APPLICANT: Owens, Wolfrand
APPLICANT: Baillie, George
ITILE OF INVENTION, No. 6670452-Naturally Occurring Lipoprotein Particle
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR APPLICATION NUMBER: DCT/GB97/02610
PRIOR APPLICATION NUMBER: DCT/GB97/02610
PRIOR APPLICATION NUMBER: MB 9620153.8
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.0
SOFTWARE: PatentIn version 3.0
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE: Artificial Sequence
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US-09-269-533A-6
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Best Local Similarity
Matches 9; Conserva
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US-09-269-533A-5
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                                                                                                                                                              Sequence 6, Application US/09269533A
Patent No. 6670452
                                                                                                                                            GENERAL INFORMATION:
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        APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Baillie, George
TITLE OF INVENTION: No. 6670452-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
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Best Local Similarity 100.
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                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: misc feature LOCATION: ()..[)
OTHER INFORMATION: Cholesterol linked at C-terminus of peptide analogue NAME/KEY: misc feature LOCATION: ()..[)
OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: University of Strathclyde APPLICANT: Halbert, Gavin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
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RLTRKRGLK 16
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                                                                                                                                                                                                                                                                                                                                               100.0%; Score 44; DB 4; ilarity 100.0%; Pred. No. 0.056; Conservative 0; Mismatches
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US-09-079-030-166
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TELEFAX: 512/4/1.

INFORMATION FOR SEQ ID NO: 16

SEQUENCE CHARACTERISTICS:

"ENGTH: 36 amino acids
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US-09-079-030-166
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Query Match
Best Local Similarity
                                                                                                                                                                                                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/079,030
FILING DATE: CONCURRENTLY Herewith
ATTORNEY/AGENT INFORMATION:
NAME: MCMIllian, Nabeela R.
REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARAG:003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent No.
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Best Local
                                                                                                                                                                                                                                                                                                                                                        STATE: Texas
COUNTRY: USA
ZIP: 77210
ZIP: 77210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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APPLICANT: Guever
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PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
                                                                                                                                                                                            TELECOMMUNICATION INFORMATION
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NAME/KEY: misc_feature
LOCATION: ()..()
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100
NAME/KEY: misc_feature
LOCATION: ()..()
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: MOOTE, Paul J.
TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
NUMBER OF SEQUENCES: 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
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TYPE: PRT
ORGANISM: Artificial Sequence
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                                                                   STRANDEDNESS:
TOPOLOGY: li
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0. 663562
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9; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/09079030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Moore, Paul J.
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 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ۰,
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Pred. No. 0.056;
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Score 44; Pred. No.

DB 4; 0.089;

Length 36;

ADDRESSEE: Milnamow, Ltd.

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RESULT 13
US-07-959-946-1
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US-09-079-030-98
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Patent No. 540803
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GENERAL INFORMATION:
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Best Local (
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
SECURICE SEAMING ACIDS
SENGTH: 51 aming acids
                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Smith, Richard K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC COMPATIBLE
COMPUTER: COMPATIBLE
COMPUTER: PC COMPATIBLE
COMPATIBLE
COMPATIBLE
COMPUTER: PC COMPATIBLE

                                                                                        APPLICANT: Koduri, Raju
APPLICANT: Young, Stephen G.
APPLICANT: Witztum, Joseph L.
APPLICANT: Curtiss, Linda K.
TITLE OF INVENTION: Lipoprotein Assays Using Antibodies to a
TITLE OF INVENTION: Pan Native Epitope and Recombinant Antigens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: MCM1111an, Nabeela R.
REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARAG:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Hoogeveen, Ron
APPLICANT: Moore, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: Concur CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Houston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 RLTRKRGLK 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity 9; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RLTRKRGLK 15
                                                                                                                                                                                                                                                                                                                                                                                                                Application US/07959946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Texas
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ilarity 100.0%;
Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Arnold,
Dressler, Goldsmith, Shore, Sutker &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Concurrently Herewith
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           White & Durkee
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ARAG: 003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
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Pred. No. 0.12;
Mismatches
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RESULT 14
US-08-333-577-1
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/901,706
FILING DATE: 18-JUN-1992
ATTORNEY/AGENT INFORMATION:
NAME: Gamson, Edward P.
REGISTRATION NUMBER: 29,381
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Smith, Richard K.
APPLICANT: Koduri, Raju
APPLICANT: Young, Stephen G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 377 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 60601
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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STREET: 10.
CITY: Chicago
CTATE: Illinois
                                   SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/333,577 FILING DATE:
                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/959,946
                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Lil
TITLE OF INVENTION: Par
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Witztum, Jöseph L.
APPLICANT: Curtiss, Linda K.
TITLE OF INVENTION: Lipoprotein Assays Using Antibodies to a
TITLE OF INVENTION: Pan Native Epitope and Recombinant Antigens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: (312)616-5400
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                ADDRESSEE: Dressler, Goldsmith, Shore, Sutker ADDRESSEE: Milnamow, Ltd.
STREET: 180 No. 5786206th Stetson, Suite 4700 CITY: Chicago STATE: 11linois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 100.0%; es 9; Conservarior
                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
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Pred. No. 0.81;
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                                                                                                Version #1.25
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; NAME: Gamson, Edward P.
; REGISTRATION NUMBER: 29,381
; REFERENCE/DOCKET NUMBER: SCRF
TELECOMMUNICATION IMPORMATION:
; TELEPHONE: (312)616-5400
; TELEPAX: (312)616-5460
; INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 377 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: protein
US-08-333-577-1
                                                                                              NAME: Gamson, Edward P.
REGISTRATION NUMBER: 29,381
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312)616-5400
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 377 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: protein
PCT-US92-08634-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 15
PCT-US92-08634-1
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PACENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/08634
FILING DATE: 19921009
CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 07/901,706
FILING DATE: 18-JUN-1992
ATTORNEY/AGENT INFORWATION:
NAME: Gamson, Edward P.
NAME: Gamson, Edward P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application PC/TUS9208634
GENERAL INFORMATION:
APPLICANT: Smith, Richard K.
APPLICANT: Koduri, Raju
APPLICANT: Voung, Stephen G.
APPLICANT: Witztum, Joseph L.
APPLICANT: Witztum, Joseph L.
APPLICANT: Curtiss, Linda K.
TITLE OF INVENTION: Lipoprotein Assays Using Antibodies to a
TITLE OF INVENTION: Pan Native Epitope and Recombinant Antigens
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
Query Match 100.0%; Score 44; DB 5; Length 377; Best Local Similarity 100.0%; Pred. No. 0.81; Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 100.0%; Score 44; DB 1; Length 377; Best Local Similarity 100.0%; Pred. No. 0.81; Matches 9; Conservative 0; Mismatches 0; Indels
                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 180 Nort
CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Dressler, Goldsmith, Shore, Sutker & ADDRESSEE: Milnamow, Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             146 RLTRKRGLK 154
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Search completed: January 12, 2005, 13:33:16 Job time : 21.1935 secs

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Result
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence:
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                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                            Score
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1: /cgn2_6/ptodata/1/pubpaa/USO7_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/USO6_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/USO7_NEW_PUB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

7: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

8: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
                                                                                                                                                                                                                                                          Query
Match Length DB
                        100.0
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Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   January 12, 2005, 13:31:02; Search time 72.2903 Seconds (without alignments) 44.980 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1608061 seqs, 361289386 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      44
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                / Cgm2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep:*
/ Cgm2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep:*
/ Cgm2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep:*
/ Cgm2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep:*
/ Cgm2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
/ Cgm2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
/ Cgm2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
/ Cgm2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep:*
       7 US-10-657-404A-8
US-09-823-418-20
US-09-822-965-20
US-09-269-533A-3
US-09-269-533A-3
US-09-398-902-2
0 US-09-391-375A-76
4 US-10-358-594-2
7 US-10-657-404A-2
10 US-09-269-533A-4
US-09-269-533A-5
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                Sequence 8, Appli
Sequence 20, Appl
Sequence 20, Appli
Sequence 2, Appli
Sequence 3, Appli
Sequence 2, Appli
Sequence 76, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 3, Appli
Sequence 4, Appli
Sequence 4, Appli
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ALIGNMENTS

45	44	43	42	41	40	39	38	37	36	35 5	34 4	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14
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US-09-822-965-2	US-09-823-418-4	23-	-09-823-418-	US-09-822-965-12	US-09-822-965-11	-09-822-965-	-09-822-	-965-	-09-823-418-	-09-823-418-	-09-823-4	-09-823-418-	-09-823-41	US-09-822-965-6		US-09-823-418-6	9-823-4	10-428-817/	-741-	10-741-601-	US-10-403-902A-32	-09-751-708A-	-09-802-640-3	US-09-870-759-128	US-10-741-601-431	09-864-761-4	-10-333-	-10-657-404A-	-10-657-	S-10-657-404A-	US-09-269-533A-6
2,	4.	س ۲	'n	Sequence 12, Appl	e 11,	e 9, App	e 7,	e 5,	Sequence 12, Appl	e 11,	e 9, App	7,	<u></u> თ	σ,		6	1, Apr	e 124,	43	e 432,	32,	e 128,	e 32,	128,	Sequence 431, App	4683	1,	9	o	e 5,	Sequence 6, Appli

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; OTHER INFORMATION: Apo B binding site sequence US-10-657-404A-8
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                                                                                  Query Match
Best Local S
Matches 9
                                                                                                                                                                                                               SEQ ID NO 8
LENGTH: 9
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Bailie, George
TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: PO7885US-CIP
CURRENT APPLICATION NUMBER: US/10/657,404A
CURRENT FILING DATE: 2003-09-08
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: GB 9620153.8 PRIOR FILING DATE: 1996-09-27 NUMBER OF SEQ ID NOS: 9
SOFTWARE: Patentin version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: University of Strathclyde APPLICANT: Halbert, Gavin APPLICANT: Owens, Moira
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1 RLTRKRGLK 9
                                                                               h 100.0%; Score 44; DB 17; Similarity 100.0%; Pred. No. 1.5e+06; 9; Conservative 0; Mismatches 0;
                    RLTRKRGLK 9
                                                                                                                           Length 9;
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US-09-823-418-20 Sequence 20, Ap Publication No.

GENERAL INFORMATION:

Application US/09823418 o. US20010024797A1

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US-09-822-965-20
                                                                           Query Match
Best Local :
                                             Matches
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APPLICANT: Boren, Jan

TITLE OF INVENTION: METHODS AND TOOLS FOR IDENTIFYING COMPOUNDS

TITLE OF INVENTION: METHODS AND TOOLS FOR IDENTIFYING COMPOUNDS

TITLE OF INVENTION: LDL-PROTEOGLYCAN BINDING

CURRENT APPLICATION NUMBER: US/09/823,418

CURRENT FILING DATE: 2001-03-29

PRIOR APPLICATION NUMBER: US 09/265,222

PRIOR APPLICATION NUMBER: US 60/077,618
                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 25
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 20
LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Innerarity, Thomas
APPLICANT: Boren, Jan
APPLICANT: Boren, Jan
TITLE OF INVENTION: METHODS AND TOOLS FOR IDENTIFYING
TITLE OF INVENTION: COMPOUNDS WHICH MODULATE ATHEROSCLEROSIS BY IMPACTING
TITLE OF INVENTION: LDU-PROTEOGLYCAN BINDING
CURRENT APPLICATION NUMBER: US/09/822,965
CURRENT APPLICATION NUMBER: US/09/822,965
PRIOR APPLICATION NUMBER: US 09/265,222
PRIOR PRIOR APPLICATION NUMBER: US 09/265,222
PRIOR PRIOR APPLICATION NUMBER: US 09/265,222
PRIOR APPLICATION NUMBER: US 09/265,222
PRIOR PRIOR PRIOR 1998-03-10
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Publication No. US20010029027A1
GENERAL INFORMATION:
                                                                                                              FEATURE:
NAMES/KEY: BINDING
LOCATION: (1)...(10)
OTHER INFORMATION: Putative proteoglycan binding site of wild-type
OTHER INFORMATION: human apo-B100 protein
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Best Local S
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ORGANISM: Homo sapiens
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 20
     / Match 100.0%; Score 44; DB 9; Length 10; Local Similarity 100.0%; Pred. No. 0.12; nes 9; Conservative 0; Mismatches 0; Indels
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OTHER INFORMATION: Putative proteoglycan binding site of wild-type
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TYPE: PRT
ORGANISM: Homo sapiens
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9; Conserv
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FEATURE:

NAME/KEY: misc feature
LOCATION: ()...()
OTHER INFORMATION: Synthesised poname/KEY: misc feature
                                                                                                                            SOFTWARE: PatentIn version 3.0
SEQ ID NO 3
LENGTH: 11
TYPE: PRT
ORGANISM: Artificial Sequence
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TITLE OF INVENTION: No. US20020147304Al-Naturally Occurring Lipoprotein Particle
FILE REPERBUCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR FILING DATE: 1997-09-25
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3, Application US/09269533A Patent No. US20020147304A1
OTHER INFORMATION: Cholesterol linked at C-terminus of peptide analogue
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: University of Strathclyde APPLICANT: Halbert, Gavin APPLICANT: Owens, Moira APPLICANT: Baillie, George
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SEQ ID NO 2
LENGTH: 11
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Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/269,533A CURRENT FILING DATE: 1999-06-01 PRIOR APPLICATION NUMBER: PCT/GB97/02610 PRIOR FILING DATE: 1997-09-25 PRIOR APPLICATION NUMBER: GB 9620153.8 NUMBER OF SEQ ID NOS: 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Apo B binding site sequence
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TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Baillie, George
TITLE OF INVENTION: No. US20020147304A1-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc feature LOCATION: ()..7)
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9; Conservative
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5. US20020147304A1
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Owens, Moira
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                                                        peptide analogue of the
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Pred. No.
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; LENGTH: 11
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-398-902-2
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US-09-398-902-2
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                                                    CURRENT APPLICATION NUMBER: US/09/931,375A
CURRENT FILING DATE: 2001-08-17
PRIOR APPLICATION NUMBER: US 60/304,851
PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/234,337
PRIOR APPLICATION NUMBER: US 60/234,337
PRIOR FILING DATE: 2000-09-22
PRIOR PRIOR FILING DATE: 2000-09-18
PRIOR FILING DATE: 2000-08-18
PRIOR FILING DATE: 2000-08-18
NUMBER OF SEQ ID NOS: 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-931-375A-76
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                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 76, Application US/09931375A Publication No. US20030027151A1 GENERAL INFORMATION:
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SEQ ID NO 76
LENGTH: 11
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Best Local
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APPLICANT: Bevan, Ruth
APPLICANT: Bevan, Ruth
APPLICANT: Griffiths, Helen
TITLE OF INVENTION: OXIDISED FRAGMENTS OF APOLIPOPROTEIN B AND THEIR USE
TILE REFERENCE: 3523P003
CURRENT APPLICATION NUMBER: US/09/398,902
CURRENT FILING DATE: 1999-09-20
PRIOR APPLICATION NUMBER: PCT/GB98/00677
PRIOR PILING DATE: 1998-03-20
PRIOR PILING DATE: 1998-03-20
PRIOR PILING DATE: 1997-03-20
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                                                                                                                                                                                                                                                         APPLICANT: WARMAN, Matthew L.
APPLICANT: GONG, Yaodin
APPLICANT: OLSEN, Bjorn R.
APPLICANT: RAWADI, Georges
APPLICANT: RAWADI, Georges
APPLICANT: ROMAN-ROMAN, Sergio
APPLICANT: ROMAN-ROMAN, Sergio
TITLE OF INVENTION: REGULATOR GENE AND SYSTEM USEFUL FOR THE DIAGNOSIS AND THERAPY
TITLE OF INVENTION: OSTEOPOROSIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn version 3.0
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                                                                                                                                                                                                                                            FILE REFERENCE: 38464-0004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc feature LOCATION: ()...()
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9; Conserv
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Similarity 100.0%;
9; Conservative 0
                                        PatentIn
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Pred. No. 0.13;
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Pred. No. 0.13;
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FILE REFERENCE: 3523P003
CURRENT APPLICATION NUMBER: US/10/358,594
CURRENT FILING DATE: 2003-02-05
PRIOR APPLICATION NUMBER: US/09/398,902
PRIOR FILING DATE: 1999-09-20
PRIOR FILING DATE: 1998-03-20
PRIOR FILING DATE: 1998-03-20
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: GB 9705831.7
PRIOR APPLICATION NUMBER: GB 9705831.7
PRIOR FILING DATE: 1997-03-20
NUMBER OF SEQ ID NOS: 3
SOFTWARE: PatentIn version 3.0
SOFTWARE: PatentIn version 3.0
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Best Local Similarity
Matches 9; Conserve
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US-10-657-404A-2
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US-10-358-594-2
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                                                                                SOFTWARE: PatentIn version 3.1 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2, Application US/10657404A Publication No. US20040235730A1 GENERAL INFORMATION:
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Publication No. US20030157567A1
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                                                                                                                                APPLICANT: Baillie, George
TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US-CIP
CURRENT APPLICATION NUMBER: US/10/657,404A
CURRENT FILING DATE: 2003-09-08
FRIOR APPLICATION NUMBER: P07/6897/02610
PRIOR PILING DATE: 1997-09-25
PRIOR PILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR PILING DATE: 1996-09-27
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                                                                                                                        NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                                                                                                                                                     APPLICANT: University of Strathclyde APPLICANT: Halbert, Gavin APPLICANT: Owens, Moira APPLICANT: Baillie, George
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APPLICANT: Bevan, Ruth
APPLICANT: Griffiths, Helen
APPLICANT: Griffiths, Helen
TITLE OF INVENTION: OXIDISED FRAGMENTS OF APOLIPOPROTEIN B AND THEIR USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Homo sapiens
ORGANISM: Artificial Sequence FEATURE:
                                        TYPE: PRT
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                                                               ENGTH:
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Pred. No. 0.
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Pred. No. 0.13;
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US-09-269-533A-4
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; OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
US-10-657-404A-3
                                                                                                                                                                                                        Sequence 4, Application US/09269533A Patent No. US20020147304A1 GENERAL INFORMATION:
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US-10-657-404A-3
                                                                   APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Owens, Moira
APPLICANT: Owens, Moira
APPLICANT: Baillie, George
TITLE OF INVENTION: NO. US20020147304A1-Naturally Occurring Lipoprotein Particle
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 199-06-01
CURRENT FILING DATE: 199-06-01
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; OTHER INFORMATION: Apo
US-10-657-404A-2
                     PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
                                                                                                                                                           APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
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Best Local :
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OTHER INFORMATION: Cholesterol linked at C-terminus of peptide analogue
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: University of Strathclyde APPLICANT: Halbert, Gavin APPLICANT: Owens, Moira APPLICANT: Baillie, George
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TYPE: PRT
ORGANISM: Artificial Sequence
PEATURE:
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9; Conservative 0
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Pred. No.
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; Sequence 5, Application US/09269533A; Patent No. US20020147304A1; GENERAL INFORMATION: APPLICANT: University of Strathclyde; APPLICANT: Halbert, Gavin; APPLICANT: Owens, Moira; APPLICANT: Baillie, George
                                                                                                            RESULT 13
US-09-269-533A-5
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US-10-657-404A-4
                                           Query Match
Best Local Similarity 100.
9; Conservative
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SEQ ID NO 4
LENGTH: 13
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Publication No. US20040235730A1
GENERAL INFORMATION:
APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Baillie, George
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Matches
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PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Baillie, George
TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US-CIP
CURRENT APPLICATION NUMBER: US/10/657,404A
CURRENT FILING DATE: 2003-09-08
                                                                                                                     NAME/KEY: misc feature OTHER INFORMATTON: Synthesised peptide analogue of the Apo B 100 binding FEATURE:
NAME/KEY: misc feature
OTHER INFORMATTON: Retinoic acid linked at N-terminus of peptide analogue
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SOFTWARE: PatentIn version
SEQ ID NO 4
LENGTH: 13
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc feature
LOCATION: ()...()
OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
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                          RLTRKRGLK
RLTRKRGLK 12
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                                                                      100.0%; Score 44; DB 1: 100.0%; Pred. No. 0.15;
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Pred. No.
                                                         Mismatches
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                                                                                     DB 17;
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US-09-269-533A-6
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LENGTH: 22
TYPE: PRT
ORGANISM: Artificial Sequence
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Best Local Similarity 100.0%;
Matches 9; Conservative (
                                                           Matches
                                                                            Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
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PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/269,533A CURRENT FILING DATE: 1999-06-01
                                                                                                                             FEATURE: MISC feature

NAME/KEY: misc feature

LOCATION: ()...()

OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding

NAME/KEY: misc feature

LOCATION: ()...()

OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.0 EQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Baillie, George
TITLE OF INVENTION: No. US20020147304A1-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
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OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
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                                                                                                                                                                                                                                                                                     LENGTH: 22
TYPE: PRT
ORGANISM: Artificial Sequence
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OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
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OTHER INFORMATION: Cholesterol linked at C-terminus of peptide analogue
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                                                         Similarity
9; Conserv
RLTRKRGLK 9
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Owens, Moira
                                                           Conservative
                                                                         100.0%;
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                                                       Score 44; DB 9;
Pred. No. 0.25;
Mismatches 0
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Pred. No. 0.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: GB 9620153.8 PRIOR FILING DATE: 1996-09-27 NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/657,404A CURRENT FILING DATE: 2003-09-08 PRIOR APPLICATION NUMBER: PCT/GB97/02610 PRIOR FILING DATE: 1997-09-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Baillie, George
TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US-CIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: University of Strathclyde APPLICANT: Halbert, Gavin
                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn version 3.1
                                                                                                                                             FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
                                                                                                                                                                                                              FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Cholesterol linked at C-terminus of peptide analogue
                                                                                                                                                                                                                                                                      NAME/KEY: misc_feature
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
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RLTRKRGLK 16
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Owens, Moira
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A;Residues: 1-269 <LAM>
A;Residues: 1-269 <LAM>
A;Cross-references: UNIPROT:Q60537; UNIPROT:Q60536
C;Superfamily: apolipoprotein B
C;Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron; glycoprotein;

the TDI.

R;Pape, M.E.; Castle, C.K.; Murray, R.W.; Funk, G.M.; Hunt, C.E.; Marotti, K.R.; Melchio. Biochim. Biophys. Acta 1086, 326-334, 1991
A;Title: Apo B metabolism in the cynomolgus monkey: evidence for post-transcriptional relapse number: S32802; MUID:92075708; PMID:1742325
A;Accession: S32802

A;Cross-references: UNIPROT:Q28473; EMBL:X15737; NID:g38047; PIDN:CAA33755.1; PID:g93012: C;Superfamily: apolipoprotein B

A;Status: preliminary A;Molecule type: mRNA A;Residues: 1-596 <PAP>

apolipoprotein B - crab-eating macaque (fragment)
C;Species: Macaca fascicularis (crab-eating macaque)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C;Accession: S32802

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R;Law, A.; Scott, J.; R;Law, A.; Scott, J.; Lipid Res. 31, 11 A;Title: A cross-spe A;Reference number: A;Accession: C60950	C60950 apolipopro C;Species C;Date: 3:	RESULT 1	•	45	44	43	42	41	40	39	38	37	36	35	34	ω w	32	31	30	
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T; Audies Full: Cooper R; Law, A.; Scott, J. J. Lipid Res. 31, 1109-1120, 1990 A; Title: A cross-species comparison of the Appelerance number: A60950; MUID:90324804; A; Accession: C60950	C60950 apolipoprotein B-100 - golden hamster (fragment) C;Species: Mesocricetus auratus (golden hamster) C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 09-Jul-2004		ALIGNMENTS	AC3142	B91140	E85985	E65112	A98146	S39854	B82400	S28609	TVMUG1	T03168	G87376	T48965	D86481	F84517	H84486	T01955	
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A;Molecule type: mRNA
A;Residues: 1-272,'N',274-617,'A',619-1217,'B',1219-2091,'V',2093-2364,'T',2366-2679,'Q',A;Residues: 1-272,'N',214-617,'A',619-1217,'B',1219-2091,'V',2093-2364,'T',2366-2679,'Q',A;Residues: 1-272,'N',1410-15, Higuchi, K.; Hospattankar, A.; Lackner, K.; Lee, N.; Brewer Jr., J., Grant, S.M.; Higuchi, K.; Hospattankar, A.; Lackner, K.; Lee, N.; Brewer Jr., Proc. Natl. Acad. Sci. U.S.A. 83, 8142-8146, 1986
A;Reference number: A94134; MUID:87041416; PMID:3464946
                                                                                                                                                                                         R;Note: 1109-Asp was also found
R;Knott, T.J.; Wallis, S.C.; Powell, L.M.; Pease, R.J.;
Nucleic Acids Res. 14, 7501-7503, 1986
A;Title: Complete cDNA and derived protein sequence of h
A;Reference number; A93639; MUID:87016385; PMID:3763409
                                                                                                                                                                                                                                                                                                                 A;Molecule type: mRNA
A;Residues: 1-11,15-2539,'S',2541-3823,'R',3825-4563 <CLA>
                                                                                                                                                                                                                                                                                                                                                   R;Cladaras, C.; Hadzopoulou-Cladaras, M.; Nolte, R.T.; Atkinson, D.; Zannis, V.I.
EMBO J. 5, 3495-3507, 1986
A;Title: The complete sequence and structural analysis of human apolipoprotein B-100: re
A;Reference number: A91058; MUID:87161758; PMID:3030729
                                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: DNA
A;Residues: 1-617,'A',619-1929,'F',1931-3318,'D',3320-3426,'T',3428-3431,'Q',3433-3731,'A
A;Cross-references: UNIPROT:P04114; UNIPROT:P78482; UNIPROT:P78479; UNIPROT:95UMNO; UNIF
R:Cladaras, C.; Hadzopoulou-Cladaras, M.; Nolte, R.T.; Atkinson, D.; Zannis, V.I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Species: Homo sapiens (man)
(c;Date: 28-Dec-1987 #sequence revision 28-Dec-1987 #text change 09-Jul-2004 C;Accession: A27850; A25679; Ā25263; A25267; A25266; A24320; A24684; A23817; A452; I61909; I59510; I39474; I39469; I84624; I37179; PS0058 A24684; A23817; Budwig, E.H.; Blackhart, B.D.; Pierotti, V.R.; Caiati, L.; Fortier, C.; Kg DNA 6, 363-372, 1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      apolipoprotein B-100 precursor - human
N;Contains: apolipoprotein B-26; apolipoprotein B-48; apolipoprotein
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C;Superfamily: apolipoprotein B
C;Keywords: atherosclerosis; calcium;
F;435-445/Region: receptor binding
F;446-656/Region: receptor binding
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C;Species: Mesocricet
C;Date: 17-Apr-1993 #
C;Accession: JH0102
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A;Note: this is a revision to the sequence from reference JH0101
R;Smith, T.J.; Hautamaa, D.; Maeda, N.
Gene 87, 309-310, 1990
A;Title: Sequence of the putative low-density lipoprotein receptor-binding regions
A;Contents: annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              'fitle: DNA sequence of the human apolipoprotein B gene.
Reference number: A27850; MUID:88003974; PMID:3652907
Accession: A27850
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A; Residues: 1-779 < SMI>
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Accession: JH0102
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ion 17-Apr-1993
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A;Rereal Azza, A;Recession: Azza, A;Accession: Azza, A
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A;Residues: 1671-2323,'PYW',2327-2352,'H',2354-2398 <HAR>
A;Residues: 1671-2323,'PYW',2327-2352,'H',2354-2398 <HAR>
A;Cross-references: GB:M1,7367; NID:g178731; PIDN:AAA51741.1;
A;Shoulders, C.C.; Myant, N.B.; Sidoli, A.; Rodriguez, J.C.;
A;Thitle: Molecular cloning of human LDL apolipoprotein B cDN;
A;Reference number: A90084; MUID:86130855; PMID:3841481
A;Accession: A29287
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A,Title: Analysis of the human apolipoprotein B gene; complete
A,Reference number: A91565; MUID:87191999; PMID:2883086
A;Accession: A26533
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A;Residues: 709-791, 'SSSWKAASHGCPHSAGD', 810-906 <DEE>
A;Cross-references: GB:K03175; NID:g178821; PIDN:AAA51759.1;
R;Crarlsson, P.; Darnfors, C.; Olofsson, S.O.; Bjursell, G.
Gene 49, 29-51, 1986
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A;Residues: 485-617,'A',619-1044 <LA2>
A;Cross-references: GB.M12480; NID:g178791; PIDN:AAA51751.1; PID:g178792
A;Cross-references: GB.M12480; NID:g178791; PIDN:AAA51751.1; PID:g178792
A;Protter, A.A.; Hardman, D.A.; Schilling, J.W.; Miller, J.; Appleby, V.; Chen, G.C.; Kin Proc. Natl. Acad. Sci. U.S.A. 83, 1467-1471, 1986
A;Title: Isolation of a cDNA clone encoding the amino-terminal region of human apolipopropersists of the second control of the control of t
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A;Residues: 1-97, 'I', 99-617,'A',619-941,'YYIWSLPPKP',951-1138,'PTGRLPNCFSNGLICYSLWLHSFQE
A;Cross-references: GB:M14081, NID:9178795, PIDN:AAA51752.1; PID:9553189
Proc. Natl. Acad. Sci. U.S.A. 82, 8340-8344, 1985
A;Title: Human apolipoprotein B-100: Cloning, analysis of liver mRNA, and assignment of A;Accession: A24684; MUID:86094221; PMID:3001697
A;Accession: A24684; MUID:86094221; PMID:3001697
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A; Residues: 1-291 < PRO>
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A; Residues: 1-97, 'I', 99-328, 'V', 330-644, 'I', 646-918, 'P', 920-3318, 'D', 3320-3426, 'T', 3428-4432, 'G', 4134-4180, 'E', 4182-4563 COHE>
A; Cross-references: GB.102610; NID:g178803; PIDN:AAA35549.1; PID:g178804
A; Note: a total of 2366 residues were confirmed by direct sequencing of tryptic peptides R; Protter, A.A.; Hardman, D.A.; Sato, K.Y.; Schilling, J.W.; Yamanaka, M.; Hort, Y.J.; Hore. Natl. Acad. Sci. U.S.A. 83, 5678-5662, 1986
A; Title: Analysis of cDNA clones encoding the entire B-26 region of human apolipoprotein A; Processer Reference number: A24320; MUID:86287319; PMID:3461454
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A;Title: The complete cDNA and amino acid sequence of human apolipoprotein A;Reference number: A92556; MUID:87000488; PMID:3759943
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A;Residues: 1-617,'A',619-703,'P',705-792,'R',794-1270,'S',1272-1866,'G',1868-2036,'N',21
4189-4220,'M',4222-4563 <LAN>
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Cortese, C.; Baralle,
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i, W.H.; Gotto Jr.,
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A; Molecule type: protein
A; Residues: $1-75;101-110;129-139;158-174;197-207;276-287;298-304;306-314;526-532;538-55
36;1486-1498;1537-1556;1563-1572;1601-1610;1647-1661;1697-1724;1770-1781;1859-1897;1968-
A; Note: these fragments were derived from apo48
R; Hardman, D.A.; Protter, A.A.; Schilling, J.W.; Kane, J.P.
R; Hardman, D.A.; Protter, A.A.; Schilling, J.W.; Kane, J.P.
Biochem, Biophys. Res. Commun. 149, 1214-1219, 1997
A; Title: Carboxyl terminal analysis of human B-48 protein confirms the novel mechanism p
A; Reference number: A28002; MUID:88106542; PMID:3426612
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A;Molecule type: mRNA
A;Residues: 'N',3729-3731,'I',3733-3875,'A',3877-3948,'F',3950-3963,'Y',3965-3982,'S',35
A;Cross-references: GB:M12413; NID:9178735; PIDN:AAA51742.1; PID:9178736
R;Chen, S.H.; Habib, G.; Yang, C.Y.; Gu, Z.W.; Lee, B.R.; Weng, S.; Silberman, S.R.; Cai Science 238, 363-366, 1987
A;Title: Apolipoprotein B-48 is the product of a messenger RNA with an organ-specific ir A;Reference number: A40133; MUID:88018019; PMID:3659919
A;Accession: B40133;
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A;Experimental source: intestine
A;Experimental source: intestine
A;Note: this mRNA from intestine includes a stop codon created by RNA editing in place
R;Mehrabian, M.; Schumakar, V.N.; Fareed, G.C.; West, R.; Johnson, D.F.; Kirchgessner,
Nucleic Acids Res. 13, 6937-6953, 1985
A;Title: Human apolipoprotein B: identification of cDNA clones and characterization of
A;Reference number: A24269; MUID:86041888; PMID:3903660
A;Accession: A24269
                                                                                                                                                                                                                                                                                                                                                                                     A; Note: cysteines at positions 1112, 1422, 1505, 1662, 3761, 3917, R; LeBoeuf, R.C.; Miller, C.; Shively, J.E.; Schumaker, V.N.; Balla,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Note: the sequence shown represents the carboxyl end of apolipoprotein B-48 A;Note: two RNA species, 14.1kb and 7.5kb in length, were isolated from the human intest ch encodes the 250K apos-48, CAA encoding 2180-dln is substituted by the stop codon TAA, R;Yang, C.; Kim, T.W.; Weng, S.; Lee, B.; Yang, M.; Gotto Jr., A.M. Proc. Natl. Acad. Sci. U.S.A. 87, 2523-5527, 1990
A;Title: Isolation and characterization of sulfhydoryl and disulfide peptides of human ap A;Reference number: A35783; MUID:90319144; PMID:2115173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Molecule type: mRNA
A;Residues: 3056-3159 <MEH>
A;Residues: 3056-3159 <MEH>
A;Residues: 3056-3159 <MEH>
A;Residues: 3056-3159 <MEH>
A;Residues: GB:X03045; NID:g28783; PIDN:CAA26850.1; PID:g929609
A;Cross-references: GB:X03045; NID:g28783; PIDN:CAA26850.1; PID:g929609
R;Hospattankar, A.V.; Higuchi, K.; Law, S.W.; Meglin, N.; Brewer Jr., H.
Biochem. Biophys. Res. Commun. 148, 279-285, 1987
A;Title: Identification of a novel in-frame translational stop codon in A;Reference number: A29659; MUID:88049670; PMID:2445342
A;Accession: A29659
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A;Molecule type: mRNA
A;Residues: 4219-4337, 'S',4339-4563 <PFI>
                                                                                                                                 A;Molecule type: protein A;Residues: 873-892,'K',894-896
                                                                                                                                                                                                                    A;Title: Human apolipoprotein B: partial amino acid sequence A;Reference number: A22006; MUID:84208786; PMID:6373369 A;Accession: A22006
                                                                                                                                                                                                                                                                                                                                                R;LeBoeuf, R.C.; Miller, C.; S
FEBS Lett. 170, 105-108, 1984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: mRNA
A; Residues: 2169-2179 < HOS>
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A; Residues: 2129-2179, 2181-2235 <HA2>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R;Wei, C.F.; Chen, S.H.; Yang, C.Y.; Marcel, Y.L.; Milne, Proc. Natl. Acad. Sci. U.S.A. 82, 7265-7269, 1985
A;Reference number: A24738; MUID:86042646; PMID:2932736
A;Accession: A24738
                                                                                       A; Accession: B22006
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A;Residues: 2165-2179 <CH1>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;Molecule type: protein
;Residues: 28-41;76-97,'1',99-100;175-193;206-215;239-249;259-266;357-399;455-490;512-
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,'L',3115-3130,'R',3132-3133,'P',3135-3136,'R' <LE2>
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A;Contents: annotation; gene structure
R;Wagener, R.; Pfitzner, R.; Stoffel, W.
Biol. Chem. Hoppe-Seyler 368, 419-425, 1987
A;Title: Studies on the organization of the human apolipoprotein B 100 gene.
A;Reference number: A90715; MUID:87271140; PMID:2886136
A;Contents: annotation; gene structure
R;Weisgraber, K.H.; Rall Jr., S.C.
J. Biol. Chem. 262, 11097-11103, 1987
A;Title: Human apolipoprotein B-100 heparin-binding sites.
A;Reference number: A92605; MUID:87280197; PMID:3301850
A;Contents: annotation; heparin binding and disulfide bond
R;Dashti, N.; Lee, D.M.; Mok, T.
Biochem. Biophys. Res. Commun. 137, 493-499, 1986
A;Title: Apolipoprotein B is a calcium binding protein.
A;Reference number: A90125; MUID:86242245; PMID:3087360
A;Contents: annotation; calcium binding
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R;Law, A.; Scott, J.
J. Lipid Res. 31, 1109-1120, 1990
A;Title: A cross-species comparison of the A;Reference number: A60950; MUID:90324804; A;Accession: E60950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Molecule type: mRNA
A;Residues: 1-274 <LAW>
A;Cross-references: UNIPROT:Q7M2U9
A;Note: authors translated the codon GAT for residue 155
C;Superfamily: apolipoprotein B
C;Keywords: atherosclerosis; calcium; cholesterol metabol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         apolipoprotein B-100 - rabbit (fragment) (Species: Oryctolagus cuniculus (domestic rabbit) C;Date: 31-Dec-1993 #sequence_revision 09-Sep-1994 C;Accession: A60950
                                                                                                                apolipoprotein B-100 - chicken (fragment)
c;Species: Gallus gallus (chicken)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993
C;Accession: E60950
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Nucleic Acids Res. 13, 8813-8826, 1985
A;Title: Molecular cloning of human apolipoprotein B cDNA.
A;Reference number: 137178; MUID:86093680; PMID:3841204
                                                                                                                                                                                                                   E60950
                                                                                                                                                                                                                                      RESULT 6
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J. Lipid Res. 31, 1109-1120, 1990
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Best Local
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9; Conserv
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                        apolipoprotein PMID:2373961
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hypothetical protein alr0547 [imported] - Nostoc sp. (strain PCC 7120)
C;Species: Nostoc sp. PCC 7120
A;Note: Nostoc sp. strain PCC 7120 is a Synonym of Anabaena sp. strain PCC 7120
C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Uul-2004
C;Accession: AB1875
R;Kaneko, T.; Nakamura, Y.; Wolk, C.P.; Kuritz, T.; Sasamoto, S.; Watanabe, A.; Iriguchi Nakazaki, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Yasuda, M.; Tabata, S. 105-213, 2001
DNA Res. 8, 205-213, 2001
A;Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Ana A;Reference number: AB1807; MUID:21595285; PMID:11759840
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C;Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron; glycoprotein;
F;435-445,Region: receptor binding
F;646-656/Region: receptor binding
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A.Title: A cross-species comparison of the a A.Title: A cross-species comparison of the a A.Tacesence number: A60950; MUID:90324804; a A.Taceseion: D60950
A.Tacesidues: 427-531,'S',533-700 < LAW>
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J. Lipid Res. 31, 1109-1120, 1990
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Gene 87, 309-310, 1990
A;Title: Sequence of the putative low-density lipoprotein receptor-binding regions of A;Reference number: JH0101; MUID:90236327; PMID:2332175
A;Accession: JH0101
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R/Smith, T.; Hautamaa, D.; Maeda, N.
submitted to the EMBL Data Library, May 1989
A;Reference number: S33128
A;Accession: S33128
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JH0101
apolipoprotein E
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A;Residues: 1-531,'S',533-784 <SM2>
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c;Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 09-Jul-2004
C;Accession: JH01101; S33128; D60950
R;Smith, T.J.; Hautamaa, D.; Maeda, N.
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C;Superfamily: apolipoprotein B
C;Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron;
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A; Residues: 1-275 < LA
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8; Conserv
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A; Description: Structure and function of genes involved in the metabolism of sulfite from A; Reference number: S34190
A; Reference number: S34191
A; Molecule: S34191
A; Molecule: Lype: DNA
A; Residues: 1-561 - CHAV - C
                                                                                                                                                                                                                                                                                                                           R;Haverkamp, T.; Gisselmann, G.; Schwenn, J.D. submitted to the EMBL Data Library, July 1993 A;Description: Structure and function of genes
                                                                                                                                                                                                                                                                                                                                                                                                           C;Species: Thiocapsa roseopersicina
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change
C;Accession: S34191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sulfite reductase (NADPH2) (EC 1.8.1.2) hemoprotein - Thiocapsa roseopersicina
C;Species: Thiocapsa roseopersicina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Superfamily: [acyl-carrier-protein] S-malonyltransferase; [acyl-carrier-protein] C;Keywords: acyltransferase; coenzyme A F;7-286/Domain: [acyl-carrier-protein] S-malonyltransferase homology <AMT> F;93/Active site: Ser (covalent substrate-binding) #status predicted
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S.; Smith, H.O.; Venter, J.C.; Fraser, C.M.
Science 286, 1571-1577, 1999
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A; Residues: 1-305 < WHI>
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A;Reference number: A75250; MUID:20036896; PMID:10567266
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A75334
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C/Superfamily: hypothetical protein sll1033; conserved hypothetical protein yloO homolc
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A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-680 <KUR>
A;Crose-references: UNIPROT:Q8YZD0; GB:BA000019; PIDN:BAB72505.1; PID:g17129892; GSPDB
A;Experimental source: strain PCC 7120
C;Genetics: ---
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;Experimental source: strain R1
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100.0%; F.
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%; Pred. No. 20;
0; Mismatches
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Pred. No. 16;
2; Mismatches
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20;
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16;
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T.; Zalewski,
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C.; Ma
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salivary glue protein ng-2 - fruit fly (Drosophila melanogaster)
(;Species: Drosophila melanogaster
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C;Accession: S33822
R;Furia, M.; D'Avino, P.P.; Crispi, S.; Artiaco, D.; Polito, L.C.
J. Mol. Biol. 231, 531-538, 1993
A;Title: Dense cluster of genes is located at the ecdysone-regulated 3C puf.
A;Reference number: S33822; MUID:93287124; PMID:8510164
A;Accession: S33822
          RESULT
T41529
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S33822
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A; Residues: 1-112 < FUR>
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C;Keywords: salivary gland; tandem repeat
F;1-20/Domain: signal sequence #status predicted <SIG>
F;21-107/Product: salivary glue protein homolog #status predicted
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A;Title: A new gene nested within the dunce genetic unit of Dr. A;Reference number: S12607; MUID:91016924; PMID:2120680
A;Accession: S12607
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C;Species: Drosophila melanogaster
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A;Cross-references: FlyBase:FBgn0002933
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A; Residues: 1-107 < FUR>
                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: FlyBase:FBgn0010294
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Best Local
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Similarity 55.6%;
5; Conservation
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5; Conservation
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87.5%;
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Pred. No. 20;
4; Mismatches
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Pred. No.
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Pred. No.
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                                                                                        th, T.; Connerton, P.; Cronin, A.; S.; Moule, S.; O'Gaora, P. Nature 413, 848-852, 2001
A;Authors: Parry, C.; Quail, M.; Rutherford, K.; Simmonds, M.; A;Title: Complete genome sequence of a multiple drug resistant A;Reference number: AB0502; MUID:21534947; PMID:11677608
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Fleischann, R.D.; Quackenbush, J.F.; White, O.; Nelson, K.E.; Ketchum, K.A.; Dod. Glodek, A.; Zhou, L.; Overbeek, R.; Gocayne, J.D.; Weidman, J.F.; McDonald, L. Nature 390, 364-370, 1997

A;Authors: Utterback, T.; Cotton, M.D.; Spriggs, T.; Artiach, P.; Kaine, B.P.; Sykes, A;Authors: Utterback, T.; Cotton, M.D.; Spriggs, T.; Artiach, P.; Kaine, B.P.; Sykes, A;Title: The complete genome sequence of the hyperthermophilic, sulfate-reducing archa A;Reference number: A69250; MUID:98049343; PMID:9389475
A;Accession: B69407
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                                                                                                                                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-259 < KLE>
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K.D.; Thomson, N.R.; Pickard, D.; Wain, J Davis, P.; Davies, R.M.; Dowd, L.; White,

J.; Churcher, e, N.; Farrar,

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A;Accession: AH0906
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-309 < PAR>
A;Coss-references: GB:AL513382; PIDN:CAD07846.1; PID:g16504394; GSPDB:GN00176
C;Genetics:
C;Genetics:
A;Gene: STY3508
C;Superfamily: Methanococcus jannaschii conserved hypothetical protein MJ0486
Gene: STY3508
C;Superfamily: Methanococcus jannaschii conserved hypothetical protein MJ0486
Best Local Similarity 66.7%; Score 33; DB 2; Length 309;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

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Copyright (c) 1993 - 2005 Compugen Ltd
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PRT; 421 AA. reated) sst sequence update) sst annotation update) ing squirrel). Craniata; Vertebrata; Eu Sciurognathi; Sciuridae; Sciurognathi; Springer polipoprotein B, provides pnships.";	0%; Score 44; DB 2; Length 0%; Pred. No. 1.4; 0; Mismatches 0; Indel	PRT; 414 AA. reated) sst sequence update) sst annotation update) sst annotation update) craniata; Vertebrata; Platyrrhini; Cebidae; Platyrrhini; Cebidae; onlipoprotein B, proviouslipoprotein B, proviouslip	IGNMENTS
rteleostomi; ; Petauristinae; M.S.; M.S.; s compelling	n 414; els 0; Gaps 0;	Euteleostomi; Aotinae; Aotus. Aotinae; Aotus. ex M.S.; les compelling	Q7yqp8 amblysomus Q7yqq1 dugong dugo Q7yqq1 tupaia tana Q7yqq1 phalanger o Q7yq11 tarsius sy Q7yq10 tarsius sy Q7yq10 tarsius sy Q7yq10 tachtyglossu Q7yqp7 ochotona pr Q7yq12 talpa europ Q7yq12 talpa europ Q7yq12 talpa europ Q7yq12 talces alces Q7yqq2 alces alces Q7yqq2 droccidura f Q7yqq4 myotis veli Q7yqq4 myotis veli

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SEQUENCE FROM N.A.

MEDLINE=22761261; PubMed=12878460;

Amrine-Madsen H., Koepfil K.-P., Wayne R.K., S
"A new phylogenetic marker, apolipoprotein B,

evidence for eutherian relationships.";

MO1. Phylogenet. Evol. 28:225-240(2003).

EMBL; AF548435; AAP97391.1;
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Q1-QCT-2003 (TrEMBLrel. 25, Created)
Q1-QCT-2003 (TrEMBLrel. 25, Last sequence update)
Q1-QCT-2003 (TrEMBLrel. 25, Last sequence update)
Apolipoprotein B 100 (Fragment).
Name=apoB-100;
Name=apoB-100;
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Best Local S
Matches 9
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Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Chiroptera; Megachiroptera; Pteropodidae;
Pteropodinae; Nyctimene.
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SEQUENCE FROM N.A.

MEDLINE=22761261; PubMed=12878460;

Amrine-Madsen H., Koepfli K.-P., Wayne R.K., (
"A new phylogenetic marker, apolipoprotein B,

evidence for eutherian relationships.";

MOL. Phylogenet. Evol. 28:225-240(2003).

EMBL; AY243375; AAP50763.1;
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01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Apolipoprotein B (Fragment).
Diceros bicornis (Black rhinoceros).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Perissodactyla, Rhinocerotidae, Diceros.
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Q7YR10;
01-OCT-2003
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EMBL; AY243379; AAP50767.1; -.
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432 AA;
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Conservative 0; Mismatches
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421 AA;
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Pred. No. 1.4;
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1.5;
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MEDILINE-22761261; PubMed-12878460;

Amrrine-Madsen H., Koepffli K.-P., Wayne R.K., Seridence for eutherian relationships.",

Mol. Phylogenet. Evol. 28:225-240(2003).
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01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Apollipoprotein B (Fragment).
Rousettus amplexicaudatus (Common rousette).
Eukaryota, Metazoa, Chordata, Craniata; Vertebrata; Euteleostomi,
Mammalla, Eutheria, Chiroptera; Megachiroptera; Pteropodidae;
Preropodinae; Rousettus.
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Q7YR04;
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SEQUENCE FROM N.A.
MEDLINE=22761261; PubMed=12878460;
Amrine-Madsen H., Koepfli K.-P., Wayne R.K., S
"A new phylogenetic marker, apolipoprotein B,
evidence for eutherian relationships.";
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SEQUENCE 43:
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Chiroptera; Megachiroptera; Pteropodidae;
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Name=apoB-100;
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ein B 100 (Fragment).
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provides compelling
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01-OCT-2003 (TrEMBLrel. 25, Created)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Apollpoprotein B (Fragment).
Chaetophractus villosus (South American armadillo).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Edentata; Dasypodidae; Chaetophractus.

SEQUENCE FROM N.A. NCBI_TaxID=29080; Matches Query Match

Local

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Score 44; DB Pred. No. 1.5;

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EMBL; AF548417; AAP97373.1; -.
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Amrine-Madeen H., Koepfli K.-P., Wayne R.K., 9
"A new phylogenetic marker, appropriate B,
"A rew phylogenetic marker and phylogenetic marker, appropriate B,
evidence for eutherian relationships.";
Mol. Phylogenet. Evol. 28:225-240(2003).
EMBL; AY243378; AAP50766.1; -.
                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Hystricognathi; Agoutidae; Agouti.
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Apolipoprotein B (Fragment).
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SEQUENCE
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Hystricognathi; Erethizontidae;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Hystricognathi; Hydrochaeridae;
                                                                                                                                                                                                                                                                              MEDLINE=22761261; PubMed=12878460; Mayne R.K. Amrine-Madsen H., Koepfili K.-P., Wayne R.K. "A new phylogenetic marker, apolipoprotein evidence for eutherian relationships."; Mol. Phylogenet. Evol. 28:225-240(2003).
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01-OCT-2003 (TrEMBLrel. 25,
01-MAR-2004 (TrEMBLrel. 26,
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Similarity 9; Conserv
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PS00146; BETA_LACTAMASE_A; UNKNOWN_1.
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Pred. No.
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Wayne R.K., s;
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                                                          Length 445;
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Best Local S
Matches 9
SEQUENCE FROM N.A.

MEDLINE=90236327; PubMed=2332175;

Smith T.J., Hautamaa D., Maeda N.;

"Sequence of the putative low-density lipoprotein r.
regions of apolipoprotein B in mouse and hamster.";

Gene 87,309-310(1990).

EMBL; M35187; AAA37059.1; -.

PIR; C60950; C60950.

PIR; JH0102; JH0102.
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Hamster apolipoprotein (apoB) (Fragment).
Mesocricetus auratus (Golden hamster)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalla; Eutheria; Rodentia; Sciurognathi; Muridae
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01-NOV-1996
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Pape M.E., Castle C.K., Murray R.W., Funk G.M., Hunt C.E.,
Marotti K.R., Melchior G.W.;
"Apo B metabolism in the cynomolgus monkey: evidence for positional regulation.";
Biochim. Biophys. Acta 1086:326-334(1991).
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Q28473;
Q28473;
Q1-NOV-1996 (TrEMBLrel. 01, Created)
Q1-NOV-1996 (TrEMBLrel. 01, Last sequence update)
Q1-VUN-2003 (TrEMBLrel. 24, Last annotation update)
Apolipoprotein B (Fragment).
Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey).
Markaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Macaca.
NCBI TaxID-9541;
Macaca.
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TISSUE=Liver;
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596 AA;
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Sciurognathi; Muridae; Cricetinae;
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Pred. No. 2.1;
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k MEDLINE=8731999; PubMed=2883086;
Carlsson P., Darnfors C., Olofsson S.O., Bjursell G.,
I "Analysis of the human apolipoprotein B gene; complet
f the B-74 region.";
Gene 49:29-51(1986).
Gene 49:29-51(1986).
F EMBL, M15421, AAA51758.1; -.
R PIR; A27850; LPHUB.
R PIR; A27850; C:extracellular; NAS.
R GO; GO:0005576; C:extracellular; NAS.
R GO; GO:0005576; P:lipid transporter activity; NAS.
R GO; GO:0005869; P:lipid transport; NAS.
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Name-APOB,
Homo Bapiens (Human).
Homo sapiens (Human).
Parvota; Metazoa; Chordata; Cy
Parvota; Metazoa; Primates; Cy
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Best Local S
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Q13788;
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Name=APOB;
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Submitted (MAY-1989) to the
EMBL; X15192; CAA33266.1; -.
PIR; C60950; C60950.
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TISSUE=Spleen;
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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01-OCT-2003 (TrEMBLrel. 25, Last annota
Apolipoprotein B (Fragment).
Mesocricetus auratus (Golden hamster).
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Similarity 100.0%; Pred. No. 2.7;
9; Conservative 0; Mismatches
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Sciurognathi; Muridae; Cricetinae;
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Zannis V.I.
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"Human liver apolipoprotein B-100 cDNA:
derived amino acid sequence.";
Proc. Natl. Acad. Sci. U.S.A. 83:8142-8:
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Knott T.,
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Apolipoprotein B-100 precursor (Apo B-100) [C
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MEDLINE=87016385; PubMed=3763409;

MEDLINE=87016385; PubMed=3763409;

Knott T.C., Wallis S.C., Powell L.M., Pease R.J., Lusis A.J.,

Blackhart B., McCarthy B.J., Mahley R.W., Levy-Wilson B., Scott

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Law S.W., Grant S.M., Higuchi K., Hospattankar A.V.,
Lee N., Brewer H.B. Jr.;
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                                      JOF 709-906 FROM N.A.

185270450; PubMed=3860836;

S., Motulsky A.G., Albers J.J.;

1al cDNA clone for human apolipoprotein B

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Bjursell G.;
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MEDLINE=88018019;
Chen S.-H., Habib
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Protter A.A., Hardman D.A., Sato K.Y.,
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